इंटरनेट मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

"जानने का अधिकार, जीने का अधिकार"
Mazdoor Kisan Shakti Sangathan
"The Right to Information, The Right to Live"

"पुराने को छोड नये के तरफ"
Jawaharlal Nehru
"Step Out From the Old to the New"

SP 26 (1983): ISI steam tables in SI units [MED 1: Boilers and Pressure Vessels]

"ज्ञान से एक नये भारत का निर्माण"
Satyanarayan Gangaram Pitroda
"Invent a New India Using Knowledge"

Act Number 22 of 2005
The Indian Parliament
RIGHT TO INFORMATION

Made Available By
Public.Resource.Org

"ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है"
Bhartṛhari—Nītiśatakam
"Knowledge is such a treasure which cannot be stolen"

BLANK PAGE

BRUTUM FULMEN

IGNORANTIA JURIS NON EXCUSAT

PROTECTED BY COPYRIGHT

ISI STEAM TABLES
IN
SI UNITS

ISI STEAM TABLES IN SI UNITS

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

SP : 26-1983

© INDIAN STANDARDS INSTITUTION

UDC 621·1 (083·5)

PRICE Rs 125·00

Printed in India at Kapoor Art Press, A 38/3 Mayapuri, New Delhi 110064;
and Published by the Indian Standards Institution, New Delhi 110002.

CONTENTS

	Page
1. SCOPE	1
2. NOTATION	1
3. FORMULATION AND EQUATIONS	1
4. TABLE 1A SATURATION PROPERTIES PRESSURE (mm Hg) TABLE (100 kPa = 1 bar)	23
5. TABLE 1B SATURATION PROPERTIES PRESSURE (MPa) TABLE	26
6. TABLE 2 SATURATION PROPERTIES TEMPERATURE TABLE (1 MPa = 10 bar)	35
7. TABLE 3 WATER AND STEAM (1 MPa = 10 bar)	46
8. TABLE 3A WATER AND SUPER HEATED STEAM IN 1°C STEP OF TEMPERATURE NEAR CRITICAL POINT	220
9. TABLE 4 SPECIFIC HEAT CAPACITY AT CONSTANT PRESSURE (kJ/kg K)	222
10. TABLE 5 DYNAMIC VISCOSITY IN 10^{-6} Pa.s	228
11. TABLE 6 KINEMATIC VISCOSITY IN 10^{-6} M^2/s	230
12. TABLE 7 THERMAL CONDUCTIVITY IN 10^{-3} W/m.K	232
13. TABLE 8 THERMAL DIFFUSIVITY IN 10^{-6} M^2/s	234
14. TABLE 9 PRANDTL NUMBER	236
15. TABLE 10 TRANSPORT PROPERTIES ON THE SATURATION LINE	238
16. TABLE 11 SURFACE TENSION AND LAPLACE COEFFICIENT	240
17. TABLE 12 INTERNATIONAL SKELETON TABLES (1963, 1975 AND 1977)	242
TABLE 12A INTERNATIONAL SKELETON TABLE (1963)— Thermodynamic Properties of Saturated Water and Saturated Steam	242
TABLE 12B INTERNATIONAL SKELETON TABLE (1963)— Specific Volume v of Compressed Water and Superheated Steam in cm^3/g	243
TABLE 12C INTERNATIONAL SKELETON TABLE (1963)— Specific Enthalpy of Compressed Water and Superheated Steam in J/g	244
TABLE 12D INTERNATIONAL SKELETON TABLE (1975)— Dynamic Viscosity μ of Compressed Water and Superheated Steam in 10^{-6} Pa.s	245

Page

TABLE 12E INTERNATIONAL SKELETON TABLE (1977)—
Thermal Conductivity λ of Compressed Water
and Superheated Steam in mW/(m.K) 246

TABLE 12F INTERNATIONAL SKELETON TABLE (1977)—
Thermal Conductivity λ of Saturated Water
and Saturated Steam 247

TABLE 12G INTERNATIONAL SKELETON TABLE (1975)—
Surface Tension σ of Water 247

CONVERSION FACTORS OF UNITS 248

FOREWORD

The data on the thermodynamic and transport properties are essential for the design, performance specifications and performance analysis of boilers, steam turbines, plant process and other mechanical equipment connected with power generation.

With a view to present thermodynamic data at the national level, catering to the need of Indian power industries, the Indian Standards Institution published Steam Tables in 1966. The Tables contained thermodynamic properties of steam in the range of 0 to 800°C temperature and 0 to 500 kgf/cm^2 pressure. These Tables were more or less a reproduction of Vukalovich Steam Tables 1958; which were based on Skeleton Tables available till 1956.

Since the publication of Vukalovich Tables 1958, considerable progress has been achieved in the experimental determination and analytical representation of the thermodynamic properties of water and steam. As a result, more and more reliable experimental data were made available in wider range of pressure and temperature. The Sixth International Conference on the properties of Steam in 1963 approved a Skeleton Table. This Skeleton Table was derived after considering all the data submitted by various member countries. The need was felt, at that time, for a co-relating equation to represent the properties conforming with the Skeleton Table in order to cater to the computerized calculations in the industries. An International Formulation Committee (IFC) was designated for preparing the formulation.

The Committee developed the 1967 IFC Formulation for industrial use and the 1968 IFC Formulation for scientific and general uses. These formulations were approved at the Seventh International Conference in 1968. The two formulations generate essentially the same values except in a small region near the critical point where the 1968 formulation takes care of the critical region anomalies to a certain extent. The 1967 IFC Formulation is comparatively simple in nature for programming purposes and it covers all the regions required in the industrial calculation. The ASME, JSME, VDI and UK Steam Tables currently in circulation were prepared using the 1967 IFC Formulation.

In 1979, the ISI Subcommittee for the preparation of Steam Tables decided to publish new Steam Tables by adopting the 1967 IFC Formulation. It was also decided to incorporate the transport properties of steam to be prepared in accordance with the latest international practices. Since our country adopted SI Units through the standards of *Weights and Measures Act, 1976*, it was also decided to bring out the new Steam Tables in SI Units.

The thermodynamic tables have been calculated using the 1967 IFC Formulations. A certain amount of graphical smoothing was done in case of isobaric specific heat capacity. The data on dynamic viscosity was prepared using the '1975 IAPS* Release on Dynamic Viscosity', and the data on thermal conductivity was prepared using the '1977 IAPS Release on Thermal Conductivity'. The formulation and the data on surface tension was prepared using the '1975

*The International Association for Properties of Steam (IAPS) is the permanent organization set up in 1968 to coordinate the international activities on the properties of steam.

IAPS Release on Surface Tension'. Values given in these IAPS Releases have been supplemented by the '1967 IFC Formulation' for the purpose of calculating the density.

The member organizations of ISI Steam Tables Subcommittee took keen interest in bringing out the new edition of ISI Steam Tables. The Bharat Heavy Electricals Limited and Bhabha Atomic Research Centre took active part in preparing the Tables. The data was generated on the computer system at BHEL, Hardwar. The Committee is greatly indebted to BHEL, Hardwar, for the contribution of their members and for providing the computer facilities.

The work on Mollier Diagrams in SI Units, which are considered necessary adjuncts to Steam Tables, is also on the programme of work of the ISI Subcommittee. This would be carried out using the computer aided plotting techniques.

Bibliography

1. ASME Steam Tables (Fourth Edition); American Society of Mechanical Engineers, New York.
2. JSME Steam Table in SI-1980; Japan Society of Mechanical Engineers, Japan.
3. Properties of Water and Steam in SI Units-1969; Verein Deutscher Ingenieure, Düsseldorf.

ISI STEAM TABLES IN SI UNITS

1. SCOPE

1.1 Steam Tables in SI Units up to 100 MPa and 800°C are covered in this publication. There are thirteen tables in all, arranged as follows; the Tables 1 to 4 relate to the thermodynamic properties and the rest are related to transport properties of water and steam:

Table 1A	Saturation properties pressure table (pressure, mm Hg)
Table 1B	Saturation properties pressure table (pressure, MPa)
Table 2	Saturation properties temperature table
Table 3	Compressed water and superheated steam
Table 3A	Water and superheated steam in 1°C steps of temperature near critical point
Table 4	Specific heat capacity at constant pressure
Table 5	Dynamic viscosity
Table 6	Kinematic viscosity
Table 7	Thermal conductivity
Table 8	Thermal diffusivity
Table 9	Prandtl number
Table 10	Transport properties on the saturation line
Table 11	Surface tension and Laplace coefficient

2. NOTATION

2.1 The following notations have been used in these Tables:

t =	Temperature	°C
T =	t + 273.15—Absolute temperature	K
p =	Pressure	Pa *or* mm Hg
v =	Specific volume	m^3/kg
h =	Specific enthalpy	kJ/kg
s =	Specific entropy	kJ/(kgK)
ρ =	Density	kg/m^3
r =	Heat of vapourization	kJ/kg
c_p =	Specific heat capacity at constant pressure	kJ/(kgK)
μ =	Dynamic viscosity	Pa.s
ν =	Kinematic viscosity	m^2/s
λ =	Thermal conductivity	W/(m.K)
α =	Thermal diffusivity	m^2/s
Pr =	$\mu c_p/\lambda$ = Prandtl number	
σ =	Surface tension	N/m
a =	Laplace coefficient	mm

Superscript ′ indicates a state of saturated water.

Superscript ″ indicates a state of dry saturated steam.

3. FORMULATION AND EQUATIONS

3.0 Introduction—With the increasing use of digital computers, particularly in complicated calculations relating to plant design and cycle optimization, it has become necessary to have a *formulation* of the thermodynamic properties of water substance convenient for industrial use.

The various thermodynamic properties are not independent of each other. For example, when the pressure p and temperature T are chosen as the independent variables of the formulation, then expressions (here called *derived functions*) for the specific volume, entropy, enthalpy and all other thermodynamic properties may be derived directly by partial differentiation of the so-called *canonical (or characteristic) function* $g = g(p, T)$, where g is the specific free enthalpy (Gibbs function). Similarly, when the specific volume v and temperature T are chosen as the independent variables, then expressions for the pressure,

specific entropy, enthalpy and all other thermodynamic properties may be derived directly by partial differentiation of the *canonical function* $f = f(v, T)$, where f is the specific free energy (Helmholtz function). The formulation is presented in terms of these canonical functions, thereby maintaining thermodynamic consistency.

The canonical functions provide the definitive expression of the formulation. The derived functions are for practical use and are secondary to the canonical functions.

The formulation presented herein describes the thermodynamic properties of ordinary water substance throughout the whole of the region that extends in pressure from the ideal-gas limit (at zero pressure) to a pressure of 10^8 N/m^2 (1000 bar), and that extends in temperature from 273.16 K (0.01°C) to 1073.15 K (800°C).

This whole region is divided into six *sub-regions*, numbered 1 to 6 and shown on the temperature-entropy plane in Fig. 1 and on the pressure-temperature plane in Fig. 2.

The entire *formulations and equations* have been split up in the following groups:

a) Physical quantities, quantity symbols, units and defined constant quantities (**3.1**)
b) Reduced dimensionless quantities and thermodynamic relations (**3.2**)
c) Specification of the subregions (**3.3**)
d) Sub-formulations (**3.4**)
e) The K-function (saturation line) (**3.5**)
f) Canonical functions (**3.6**)
g) Values of the constants (**3.7**)
h) Derived constants (**3.8**)
j) Derived functions (**3.9**)
k) Cautionary notes (**3.10**)

Brief descriptions of this grouping are as under, but the same have been dealt in details later (*see* **3.1** to **3.10**).

a) **3.1** lists the *physical quantities*, defines the *quantity symbols* and *units* used in the formulation, and defines certain *constant quantities* with the aid of which the expressions are presented in terms of reduced dimensionless variables.

b) **3.2** presents the *reduced dimensionless quantities* and also the required *thermodynamic relations* by means of which expressions for the derived functions can be obtained from the given canonical functions.

c) **3.3** specifies the sub-regions, which are identified by numbers, and gives information relating to equations which define the boundaries between subregions. These equations are identified by the letters K and L, the K-function being the equation for the saturation line and the L-function being the equation for a boundary between two sub-regions in the single-phase region.

d) **3.4** gives the specification for the *sub-formulation* to be used in each subregion. Each such sub-formulation comprises the canonical function relevant to the subregion, together with derived functions.

e) **3.5** presents the function giving the saturation line, which also serves as a boundary between subregions. This function is identified by the letter K.

f) **3.6** presents the canonical functions, which are identified by the letters A, B, C and D. The canonical parts of the sub-formulations set out in **3.4** each comprising one or more of these principal canonical functions.

g) **3.7** gives the values of the constants of the formulation. Most of these values are given numerically; a few, which are derived from other constants, are given symbolically.

The material in **3.1** *to* **3.7** *is sufficient and necessary to specify the formulation.*

h) **3.8** gives the numerical values of the derived constants and a derived form of the L-function convenient for computer use.

j) **3.9** presents those derived functions which are of practical importance.

k) **3.10** gives information on the magnitudes of small discontinuities in property values which occur at some of the boundaries between subregions and draws attention to the need for caution when making certain calculations.

3.1 Physical Quantities, Quantity Symbols, Units and Defined Constant Quantities

3.1.1 *Physical Quantities (Properties)* — The following physical quantities are given the

symbols listed:

specific Helmholtz function (specific free energy)	f
specific Gibbs function (specific free enthalpy)	g
specific enthalpy	h
specific entropy	s
specific volume	v
pressure	p
temperature (thermodynamic temperature)	T
specific isochoric heat-capacity	c_v
specific isobaric heat-capacity	c_p
quantities at the critical point	v_c, p_c, T_c
quantities for the saturated liquid	f_f, h_f, s_f, v_f
quantities for the saturated vapor	h_g, s_g, v_g
increments in quantities for evaporation from liquid to vapour	h_{fg}, s_{fg}, v_{fg}
quantities at the triple point	f_{ft}, s_{ft}, p_t, T_t
specific ideal-gas constant	R
saturation pressure	p_s
saturation temperature	T_s

3.1.2 *Units* — The units of the *Système International d'Unités* (SI units) are used and have the definitions assigned to them by the Conférence Générale des Poids et Mesures (CGPM).

These SI units are:

Quantities	*Units*	*Unit Symbol*	*Note*
f, g, h	joule per kilogram	J/kg	
v	metre³ per kilogram	m³/kg	
p	newton per metre²	N/m²	1
	joule per metre³	J/m³	
	pascal	Pa	
T	Kelvin	K	2
s, R, c_v, c_p	joule per kilogram Kelvin	J/(kg K)	2

NOTE 1—The names and unit symbols given here are synonyms for the same unit of pressure

NOTE 2—The International Formulation Committee (IFC) of the International Conference on the Properties of Steam (ICPS) has adopted the statement that the replacement of these names and unit symbols by the following shall be tolerated.

T	Kelvin	K
s, R, c_v, c_p	Joule per kilogram Kelvin	J/(kg K)

In this Statement of the Formulation use is made of these tolerated forms.

The equations giving the units adopted by the ICPS in terms of the SI units are:

$$1 \text{ J/g} = 1000 \text{ J/kg}$$

$$1 \text{ cm}^3/\text{g} = 0.001 \text{ m}^3/\text{kg}$$

$$1 \text{ bar} = 100\,000 \text{ N/m}^2 = 100\,000 \text{ J/m}^3$$

$$1 \text{ J/(g K)} = 1000 \text{ J/(kg K)}$$

The International Organization for Standardization has provided equations for other units (*see* IS : 1890) in terms of SI units.

The definitions given by the CGPM and the ISO imply that

$$T_t = 273.16 \text{ K} \qquad \text{(exactly)}$$

and that the (thermodynamic) Celsius temperature is exactly $T - T_0$, where

$$T_0 = 273.15 \text{ K} \qquad \text{(exactly)}$$

The symbol T in this Statement refers throughout to thermodynamic (absolute) temperature. Temperatures on the International Practical Scale of Temperature (1948) provide a closely approximate realization of the numerical values on the thermodynamic Celsius scale. The constants listed in 3.7 are appropriate for use when the International Practical Scale and the thermodynamic Celsius scale are treated as being identical.

3.1.3 *Defined Constant Quantities*—In accordance with the decisions of the ICPS (Fifth International Conference, London, 1956):

$$s_{ft} = 0, f_{ft} = 0.$$

The IFC, at its first meeting in Prague, 1965, defined certain symbols for certain constant quantities. Among these are:

$$P_{t1} = 611.2 \text{ N/m}^2 = 611.2 \text{ J/m}^3$$

$$T_{c1} = 647.3 \text{ K}$$

$$P_{c1} = 22\,120\,000 \text{ N/m}^2 = 22\,120\,000 \text{ J/m}^3$$

$$v_{c1} = 0.003\,17 \text{ m}^3/\text{kg}$$

$$R_1 = 461.51 \text{ J/(kg K)}$$

NOTE — Subscripts t and c, appearing alone, would refer to the actual values at the actual triple and critical points respectively; these values are not known exactly. The further

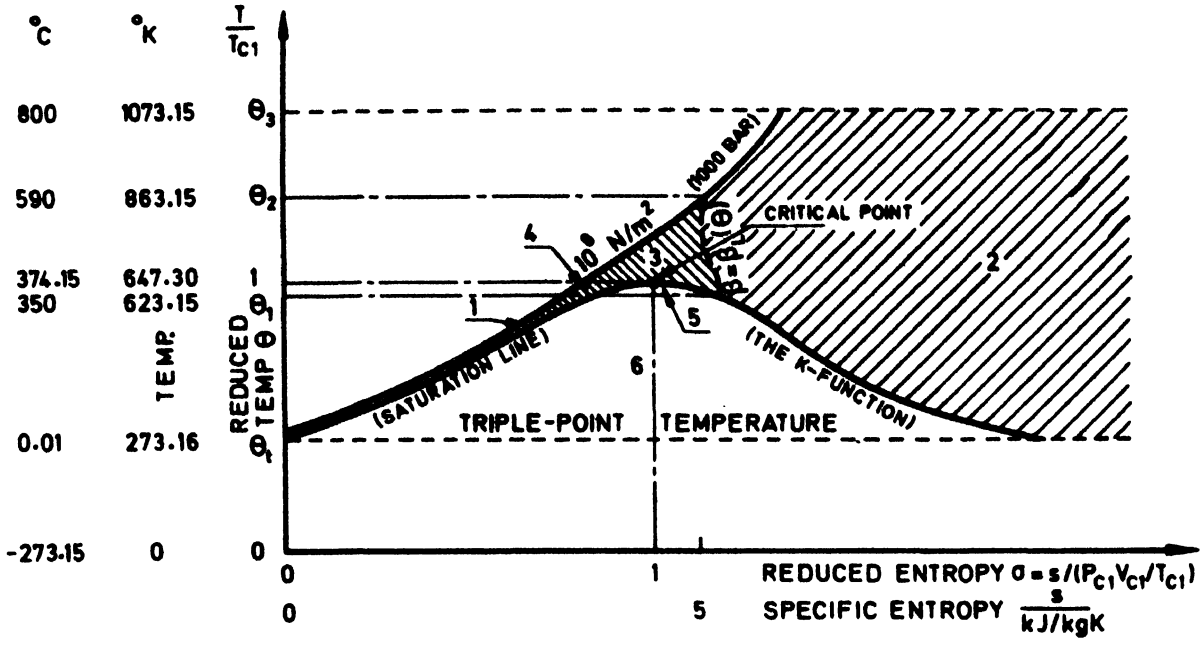

FIG. 1 ILLUSTRATION OF SUBREGIONS ON THE TEMPERATURE-ENTROPY DIAGRAM

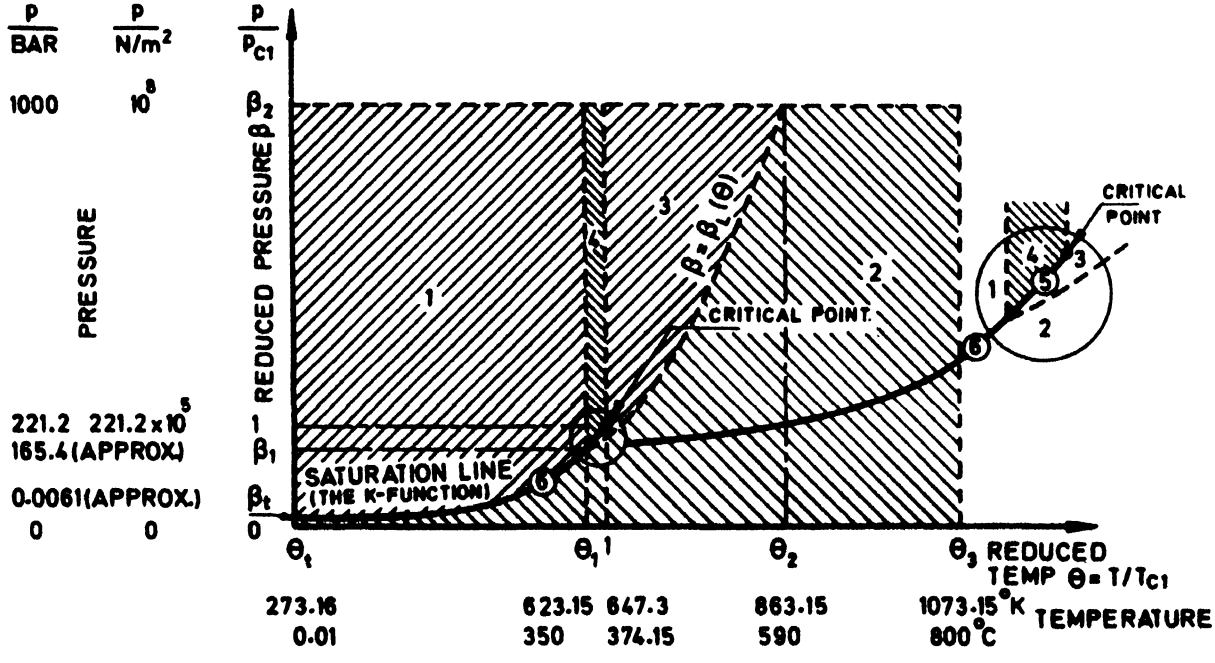

FIG. 2 ILLUSTRATION OF SUBREGIONS ON THE PRESSURE-TEMPERATURE DIAGRAM

subscript 1 refers to the above constant quantities, which coincide with the values adopted by the Sixth International Conference, New York, 1963, as the nearest estimates, at that time, of the true values. It is stressed that the constants listed in 3.7 are those appropriate for use when the defined constant quantities are as given above, and that no alterations to these defined constant quantities can be made without reviewing the values of the constants listed.

3.2 Reduced Dimensionless Quantities and Thermodynamic Relations

3.2.1 *Reduced Dimensionless Quantities*

a) In accord with IFC:

$p/p_{c1} = \beta$, the reduced pressure

$T/T_{c1} = \theta$, the reduced temperature

$v/v_{c1} = \chi$, the reduced volume

$h/(p_{c1}\, v_{c1}) = \epsilon$, the reduced enthalpy

$s/(p_{c1}\, v_{c1}/T_{c1}) = \sigma$, the reduced entropy

(b) It has been found expedient to add:

$g/(p_{c1}\, v_{c1}) = \epsilon - \theta\sigma = \zeta$, the reduced free enthalpy (Gibbs function)

$f/(p_{c1}\, v_{c1}) = \zeta - \beta\chi = \psi$, the reduced free energy (Helmholtz function)

$R_1 T_{c1}/(p_{c1}\, v_{c1}) = I_1$, the reduced ideal-gas constant

Use is also made of

$p_s/p_{c1} = \beta_K(\theta)$, the reduced saturation pressure, where $p_s = p_s(T)$

$T_s/T_{c1} = \theta_K(\beta)$, the reduced saturation temperature, where $T_s = T_s(p)$

$T_t/T_{c1} = \theta_t$, the reduced triple-point temperature

$p_t/p_{c1} = \beta_t = \beta_K(\theta_t)$, the reduced triplepoint pressure

Numerical values for θ_t, β_t, $p_{c1}\, v_{c1}$, $p_{c1}\, v_{c1}/T_{c1}$ and I_1 are given in 3.8.

3.2.2 *Thermodynamic Relations*

The known thermodynamic relations

$$s = -(\partial g/\partial T)_p = -(\partial f/\partial T)_v$$

$$v = +(\partial g/\partial p)_T$$

$$p = -(\partial f/\partial v)_T$$

$$h = g + Ts = f + pv + Ts.$$

when written in terms of the reduced dimensionless quantities become:

$$\sigma = -(\partial\zeta/\partial\theta)_\beta = -(\partial\psi/\partial\theta)_\chi$$

$$\chi = +(\partial\zeta/\partial\beta)_\theta$$

$$\beta = -(\partial\psi/\partial\chi)_\theta$$

$$\epsilon = \zeta + \theta\sigma = \psi + \beta\chi + \theta\sigma$$

The reduced specific heat-capacities are given by:

$$\frac{c_p\, T_{c1}}{P_{c1}\, v_{c1}} = -\theta\left(\frac{\partial^2\zeta}{\partial\theta^2}\right)_\beta$$

$$= -\theta\left(\frac{\partial^2\psi}{\partial\theta^2}\right)_\chi + \theta\left(\frac{\partial^2\psi}{\partial\chi\partial\theta}\right)^2 \Big/ \left(\frac{\partial^2\psi}{\partial\chi^2}\right)_\theta$$

$$\frac{c_v\, T_{c1}}{P_{c1}\, v_{c1}} = -\theta\left(\frac{\partial^2\psi}{\partial\theta^2}\right)_\chi$$

$$= -\theta\left(\frac{\partial^2\zeta}{\partial\theta^2}\right)_\beta + \theta\left(\frac{\partial^2\zeta}{\partial\theta\partial\beta}\right)^2 \Big/ \left(\frac{\partial^2\zeta}{\partial\beta^2}\right)_\theta$$

3.3 Specification of the Sub-Regions

3.3.1 The subregions are specified in the following table and illustrated in Fig. 1 and 2.

Temperature range	*Pressure range*	*Sub-region*
$\theta_t \leqq \theta \leqq \theta_1$	$0 \leqq \beta < \beta_K(\theta)$	2
	$\beta = \beta_k(\theta)$	6
	$\beta_K(\theta) < \beta \leqq \beta_2$	1
$\theta_1 < \theta < 1$	$0 \leqq \beta \leqq \beta_L(\theta)$	2
	$\beta_L(\theta) < \beta < \beta_K(\theta)$	3
	$\beta = \beta_K(\theta)$	5
	$\beta_K(\theta) < \beta \leqq \beta_2$	4
$1 \leqq \theta < \theta_2$	$0 \leqq \beta \leqq \beta_L(\theta)$	2
	$\beta_L(\theta) < \beta \leqq \beta_2$	3
$\theta_2 \leqq \theta \leqq \theta_3$	$0 \leqq \beta \leqq \beta_2$	2

The functions $\beta_K(\theta)$ and $\beta_L(\theta)$ are equations for boundaries between subregions, the K-function being the equation for the saturation line and the L-function the equation for the boundary

between subregions 2 and 3. These functions, and the constants required to complete the specification of the subregions in the table, are specified in 3.3.2 and 3.3.3, respectively.

3.3.2 *Equations for Boundaries Between Subregions*

3.3.2.1 *The K-function* — Reduced saturation pressure.

This function is given in 3.5.

3.3.2.2 *The L-function* — Reduced pressure along the boundary between subregions 2 and 3.

$$\beta_L = \beta_L(\theta) = \frac{(\theta_2 - \theta)\beta_1 + (\theta - \theta_1)\beta_2 - L(\theta_2 - \theta)(\theta - \theta_1)}{\theta_2 - \theta_1}$$

whence

$$\frac{d\beta_L}{d\theta} = \beta_L' = \beta_L'(\theta) = \frac{\beta_2 - \beta_1 - L(\theta_2 - 2\theta + \theta_1)}{\theta_2 - \theta_1}$$

Derived forms for β_L and β_L', convenient for computer use, are given in 3.8.2.

3.3.3 *Constants Relating to Boundaries Between Sub-regions*

3.3.3.1 *Primary constants* — The constant L and the constants relating to the K-function are given in 3.7.1.

3.3.3.2 *Expressions for values of derived constants*—Expressions for the values of the derived constants θ_t, θ_1, θ_2, θ_3, β_1 and β_2 are given in 3.7.2.

3.3.3.3 *Numerical values of derived constants* — The numerical values of θ_t, θ_1, θ_2, θ_3, β_1 and β_2 are given in 3.8.1, and the numerical values of the constants relating to the derived forms for β_L and β_L' are given in 3.8.2.

3.4 Sub-formulations

3.4.0 For each subregion these are set out below

a) the canonical function, and

b) the derived functions, and the relations between the canonical and derived functions.

The functions of each sub-formulation are identified by the same number as that identifying the subregion.

The functions $\zeta_A(\theta, \beta)$, $\zeta_B(\theta, \beta)$, $\psi_C(\theta, \chi)$ and $\psi_D(\theta, \chi)$ are given in 3.6.

The purpose of introducing the terms α_0 and $\alpha_1\theta$ is explained in 3.7.2.

3.4.1 *Subregion 1*

$$\zeta = \zeta_1(\theta, \beta) = \zeta_A(\theta, \beta) + \alpha_0 + \alpha_1\theta$$

$$\chi = \chi_1(\theta, \beta) = (\partial\zeta_1/\partial\beta)_\theta$$

$$\sigma = \sigma_1(\theta, \beta) = -(\partial\zeta_1/\partial\theta)_\beta$$

$$\epsilon = \epsilon_1(\theta, \beta) = \zeta_1 + \sigma_1\theta$$

3.4.2 *Subregion 2*

$$\zeta = \zeta_2(\theta, \beta) = \zeta_B(\theta, \beta) + \alpha_0 + \alpha_1\theta$$

$$\chi = \chi_2(\theta, \beta) = (\partial\zeta_2/\partial\beta)_\theta$$

$$\sigma = \sigma_2(\theta, \beta) = -(\partial\zeta_2/\partial\theta)_\beta$$

$$\epsilon = \epsilon_2(\theta, \beta) = \zeta_2 + \sigma_2\theta$$

3.4.3 *Subregion 3*

$$\psi = \psi_3(\theta, \chi) = \psi_C(\theta, \chi) + \alpha_0 + \alpha_1\theta$$

$$\beta = \beta_3\{\theta, \chi\} = -(\partial\psi_3/\partial\chi)_\theta$$

$$\sigma = \sigma_3\{\theta, \chi\} = -(\partial\psi_3/\partial\theta)_\chi$$

$$\epsilon = \epsilon_3\{\theta, \chi\} = \psi_3 + \sigma_3\theta + \beta_3\chi$$

$$\zeta = \zeta_3\{\theta, \chi\} = \psi_3 + \beta_3\chi$$

Expressions having θ and β as the independent variables are needed later.

The equation $\beta = \beta_3\{\theta, \chi\}$, when solved for χ, gives $\chi = \chi_3(\theta, \beta)$. If there be more than one such root, then χ_3 is the greatest of these.

Then

$$\sigma = \sigma_3\{\theta, \chi_3(\theta, \beta)\} = \sigma_3(\theta, \beta)$$

$$\epsilon = \epsilon_3\{\theta, \chi_3(\theta, \beta)\} = \epsilon_3(\theta, \beta)$$

$$\zeta = \zeta_3\{\theta, \chi_3(\theta, \beta)\} = \zeta_3(\theta, \beta)$$

3.4.4 *Subregion 4*

$$\psi = \psi_4(\theta, \chi) = \psi_C(\theta, \chi) + \alpha_0 + \alpha_1\theta + \psi_D(\theta, \chi)$$

$$\beta = \beta_4\{\theta, \chi\} = -(\partial\psi_4/\partial\chi)_\theta$$

$$\sigma = \sigma_4\{\theta, \chi\} = -(\partial\psi_4/\partial\theta)_\chi$$

$$\epsilon = \epsilon_4 \{\theta, \chi\} = \psi_4 + \sigma_4\theta + \beta_4\chi$$

$$\zeta = \zeta_4 \{\theta, \chi\} = \psi_4 + \beta_4\chi$$

Expressions having θ and β as the independent variables are needed later.

The equation $\beta = \beta_4 (\theta, \chi)$, when solved for χ, gives $\chi = \chi_4 (\theta, \beta)$. If there be more than one such root, then χ_4 is the least of these.

Then

$$\sigma = \sigma_4 \{\theta, \chi_4(\theta, \beta)\} = \sigma_4(\theta, \beta)$$

$$\epsilon = \epsilon_4 \{\theta, \chi_4 (\theta, \beta)\} = \epsilon_4 (\theta, \beta)$$

$$\zeta = \zeta_4 \{\theta, \chi_4 (\theta, \beta)\} = \zeta_4 (\theta, \beta)$$

3.4.5,6 *Subregions 5 and 6*

$$\beta = \beta_K (\theta)$$

$$\text{Dryness fraction} = \frac{\chi - \chi_f}{\chi_g - \chi_f} = \frac{\sigma - \sigma_f}{\sigma_g - \sigma_f} = \frac{\epsilon - \epsilon_f}{\epsilon_g - \epsilon_f}$$

where the subscripts f and g refer respectively to the liquid and gaseous phases and the quantities bearing these subscripts are given below:

3.4.5 *Subregion 5*

$$\chi_f = \chi_4 (\theta, \beta_K (\theta)), \quad \chi_g = \chi_3 (\theta, \beta_K (\theta))$$

$$\sigma_f = \sigma_4 (\theta, \beta_K (\theta)), \quad \sigma_g = \sigma_3 (\theta, \beta_K (\theta))$$

$$\epsilon_f = \epsilon_4 (\theta, \beta_K (\theta)), \quad \epsilon_g = \epsilon_3 (\theta, \beta_K (\theta))$$

3.4.6 *Subregion 6*

$$\chi_f = \chi_1 (\theta, \beta_K (\theta)), \quad \chi_g = \chi_2 (\theta, \beta_K (\theta))$$

$$\sigma_f = \sigma_1 (\theta, \beta_K (\theta)), \quad \sigma_g = \sigma_2 (\theta, \beta_K (\theta))$$

$$\epsilon_f = \epsilon_1 (\theta, \beta_K (\theta)), \quad \epsilon_g = \epsilon_2 (\theta, \beta_K (\theta))$$

The definitions given in **3.4.1** to **3.4.4** of the derived functions χ_i, σ_i, ϵ_i ($i = 1$ to 4) are hereby extended to include $\beta = \beta_K(\theta)$.

The function $\beta_K(\theta)$ is given in **3.5**.

3.5 The K-Function (Saturation Line)

3.5.1 *Reduced Saturation Pressure* This function gives the saturation line, which is also a boundary between sub-regions.

The equation for the reduced saturation pressure, β_K, as a function of the reduced temperature, θ, is

$$\beta_k(\theta) = \exp\left[\frac{1}{\theta}\frac{\sum_{\nu=1}^{5} k_\nu (1-\theta)^\nu}{\{1 + k_6(1-\theta) + k_7(1-\theta)^2\}} - \frac{(1-\theta)}{k_8(1-\theta)^2 + k_9}\right]$$

The constants of the K-function are given in **3.7.1**.

3.6 Canonical Functions

3.6.1 *The A-Function*

Reduced free enthalpy (Gibbs function)

$$\begin{aligned}\zeta_A(\theta,\beta) = {} & A_0\theta(1 - \ln\theta) + \sum_{\nu=1}^{10} A_\nu\theta^{\nu-1} \\ & + A_{11}\left(\frac{17}{29}Z - \frac{17}{12}Y\right)Z^{12/17} \\ & + \{A_{12} + A_{13}\theta + A_{14}\theta^2 + A_{15}(a_6 - \theta)^{10} \\ & + A_{16}(a_7 + \theta^{19})^{-1}\}\beta - (a_8 + \theta^{11})^{-1} \\ & \times (A_{17}\beta + A_{18}\beta^2 + A_{19}\beta^3) \\ & - A_{20}\theta^{18}(a_9 + \theta^2)\{(a_{10} + \beta)^{-3} + a_{11}\beta\} \\ & + A_{21}(a_{12} - \theta)\beta^3 + A_{22}\theta^{-20}\beta^4\end{aligned}$$

where

$$Z = Y + (a_3Y^2 - 2a_4\theta + 2a_5\beta)^{1/2}$$

$$Y = 1 - a_1\theta^2 - a_2\theta^{-6}$$

3.6.2 *The B-Function*

Reduced free enthalpy (Gibbs function)

$$\zeta_B(\theta,\beta) = I_1\theta \ln\beta + B_0\theta(1 - \ln\theta) + \sum_{\nu=1}^{5} B_{0\nu}\theta^{\nu-1} - (B_{11}X^{13} + B_{12}X^{3})\beta$$

$$- (B_{21}X^{18} + B_{22}X^{2} + B_{23}X)\beta^2 - (B_{31}X^{18} + B_{32}X^{10})\beta^3$$

$$- (B_{41}X^{25} + B_{42}X^{14})\beta^4 - (B_{51}X^{[illegible]} + B_{52}X^{28} + B_{53}X^{24})\beta^5$$

$$- \frac{(B_{61}X^{12} + B_{62}X^{11})\beta^4}{1 + b_{61}X^{14}\beta^4} - \frac{(B_{71}X^{24} + B_{72}X^{18})\beta^5}{1 + b_{71}X^{19}\beta^5} - \frac{(B_{81}X^{24} + B_{82}X^{14})\beta^6}{1 + (b_{81}X^{54} + b_{82}X^{27})\beta^6}$$

$$+ \beta\left(\frac{\beta}{\beta_L}\right)^{10} \sum_{\nu=0}^{6} B_{9\nu}X^{\nu}$$

where

$X = \exp\{b(1 - \theta)\}$ and $\beta_L = \beta_L(\theta)$, the expression for which is given in 3.3.2.2.

The B-function may also be expressed more compactly as follows :

$$\zeta_B(\theta,\beta) = I_1\theta \ln\beta + B_0\theta(1 - \ln\theta) + \sum_{\nu=1}^{5} B_{0\nu}\theta^{\nu-1}$$

$$- \sum_{\mu=1}^{5}\left\{\beta^{\mu} \sum_{\nu=1}^{n(\mu)} B_{\mu\nu}X^{z(\mu,\nu)}\right\} - \sum_{\mu=6}^{8} \frac{\sum_{\nu=1}^{n(\mu)} B_{\mu\nu}X^{z(\mu,\nu)}}{\beta^{2-\mu} + \sum_{\lambda=1}^{\ell(\mu)} b_{\mu\lambda}X^{x(\mu,\lambda)}}$$

$$+ \beta\left(\frac{\beta}{\beta_L}\right)^{10} \sum_{\nu=0}^{6} B_{9\nu}X^{\nu}$$

The numbers of terms $n(\mu)$ and $\ell(\mu)$, and the exponents $z(\mu, \nu)$ and $x(\mu, \lambda)$ are as follows:

μ	$n(\mu)$	$z(\mu, \nu)$			$\ell(\mu)$	$x(\mu, \lambda)$		μ
		$\nu = 1$	$\nu = 2$	$\nu = 3$		$\lambda = 1$	$\lambda = 2$	
1	2	13	3	—	—	—	—	1
2	3	18	2	1	—	—	—	2
3	2	18	10	—	—	—	—	3
4	2	25	14	—	—	—	—	4
5	3	32	28	24	—	—	—	5
6	2	12	11	—	1	14	—	6
7	2	24	18	—	1	19	—	7
8	2	24	14	—	2	54	27	8

3.6.3 *The C-Function*

Reduced free energy (Helmholtz function)

$$\psi_C(\theta, \chi) = C_{00} + C_{01}\chi + \sum_{\nu=2}^{11} C_{0\nu}\chi^{1-\nu} + C_{012}\ln\chi$$
$$+ \left\{C_{11}\chi + \sum_{\nu=2}^{6} C_{1\nu}\chi^{1-\nu} + C_{17}\ln\chi\right\}(\theta - 1)$$
$$+ \left\{C_{21}\chi + \sum_{\nu=2}^{7} C_{2\nu}\chi^{1-\nu} + C_{28}\ln\chi\right\}(\theta - 1)^2$$
$$+ \left\{C_{31}\chi + \sum_{\nu=2}^{9} C_{3\nu}\chi^{1-\nu} + C_{310}\ln\chi\right\}(\theta - 1)^3$$
$$+ (C_{40} + C_{41}\chi^{-5})\theta^{-23}(\theta - 1) + C_{50}\theta\ln\theta$$
$$+ \chi^6 \sum_{\nu=0}^{4} C_{6\nu}\theta^{-2-\nu} + \sum_{\nu=0}^{8} C_{7\nu}(\theta - 1)^{\nu+1}$$

3.6.4 *The D-Function*

Reduced free energy (Helmholtz function)

$$\psi_D(\theta, \chi) = \sum_{\mu=3}^{4}\sum_{\nu=0}^{4} D_{\mu\nu}y^{\mu}\chi^{-\nu}$$
$$+ y^{32}\sum_{\nu=0}^{2} D_{5\nu}\chi^{\nu}$$

where

$$y = (1 - \theta)/(1 - \theta_1)$$

3.6.5 *Constants Relating to Canonical Functions*

The values of the constants introduced in **3.6.1**, **3.6.2**, **3.6.3** and **3.6.4** are given in **3.7.1**.

3.7 Values of the Constants

3.7.1 *Numerical Values of the Primary Constants*

3.7.1.1 *Sub-region 1*

$A_0 = 6.824\,687\,741 \times 10^3$

$A_1 = -5.422\,063\,673 \times 10^2$

$A_2 = -2.096\,666\,205 \times 10^4$

$A_3 = 3.941\,286\,787 \times 10^4$

$A_4 = -6.733\,277\,739 \times 10^4$

$A_5 = 9.902\,381\,028 \times 10^4$

$A_6 = -1.093\,911\,774 \times 10^5$

$A_7 = 8.590\,841\,667 \times 10^4$

$A_8 = -4.511\,168\,742 \times 10^4$

$A_9 = 1.418\,138\,926 \times 10^4$

$A_{10} = -2.017\,271\,113 \times 10^3$

$A_{11} = 7.982\,692\,717 \times 10^0$

$A_{12} = -2.616\,571\,843 \times 10^{-2}$

$A_{13} = 1.522\,411\,790 \times 10^{-3}$

$A_{14} = 2.284\,279\,054 \times 10^{-2}$

$A_{15} = 2.421\,647\,003 \times 10^2$

$A_{16} = 1.269\,716\,088 \times 10^{-10}$

$A_{17} = 2.074\,838\,328 \times 10^{-7}$

$A_{18} = 2.174\,020\,350 \times 10^{-8}$

$A_{19} = 1.105\,710\,498 \times 10^{-9}$

$A_{20} = 1.293\,441\,934 \times 10^1$

$A_{21} = 1.308\,119\,072 \times 10^{-5}$

$A_{22} = 6.047\,626\,338 \times 10^{-14}$

$a_1 = 8.438\,375\,405 \times 10^{-1}$

$a_2 = 5.362\,162\,162 \times 10^{-4}$

$a_3 = 1.720\,000\,000 \times 10^0$

$a_4 = 7.342\,278\,489 \times 10^{-2}$

$a_5 = 4.975\,858\,870 \times 10^{-2}$

$a_6 = 6.537\,154\,300 \times 10^{-1}$

$a_7 = 1.150\,000\,000 \times 10^{-6}$

$a_8 = 1.510\,800\,000 \times 10^{-5}$

$a_9 = 1.418\,800\,000 \times 10^{-1}$

$a_{10} = 7.002\,753\,165 \times 10^{0}$

$a_{11} = 2.995\,284\,926 \times 10^{-4}$

$a_{12} = 2.040\,000\,000 \times 10^{-1}$

3.7.1.2 *Sub-region 2*

$B_0 = 1.683\,599\,274 \times 10^{1}$

$B_{01} = 2.856\,067\,796 \times 10^{1}$

$B_{02} = -5.438\,923\,329 \times 10^{1}$

$B_{03} = 4.330\,662\,834 \times 10^{-1}$

$B_{04} = -6.547\,711\,697 \times 10^{-1}$

$B_{05} = 8.565\,182\,058 \times 10^{-2}$

$B_{11} = 6.670\,375\,918 \times 10^{-2}$

$B_{12} = 1.388\,983\,801 \times 10^{0}$

$B_{21} = 8.390\,104\,328 \times 10^{-2}$

$B_{22} = 2.614\,670\,893 \times 10^{-2}$

$B_{23} = -3.373\,439\,453 \times 10^{-2}$

$B_{31} = 4.520\,918\,904 \times 10^{-1}$

$B_{32} = 1.069\,036\,614 \times 10^{-1}$

$B_{41} = -5.975\,336\,707 \times 10^{-1}$

$B_{42} = -8.847\,535\,804 \times 10^{-2}$

$B_{51} = 5.958\,051\,609 \times 10^{-1}$

$B_{52} = -5.159\,303\,373 \times 10^{-1}$

$B_{53} = 2.075\,021\,122 \times 10^{-1}$

$B_{61} = 1.190\,610\,271 \times 10^{-1}$

$B_{62} = -9.867\,174\,132 \times 10^{-2}$

$B_{71} = 1.683\,998\,803 \times 10^{-1}$

$B_{72} = -5.809\,438\,001 \times 10^{-2}$

$B_{81} = 6.552\,390\,126 \times 10^{-3}$

$B_{82} = 5.710\,218\,649 \times 10^{-4}$

$B_{90} = 1.936\,587\,558 \times 10^{2}$

$B_{91} = -1.388\,522\,425 \times 10^{3}$

$B_{92} = 4.126\,607\,219 \times 10^{3}$

$B_{93} = -6.508\,211\,677 \times 10^{3}$

$B_{94} = 5.745\,984\,054 \times 10^{3}$

$B_{95} = -2.693\,088\,365 \times 10^{3}$

$B_{96} = 5.235\,718\,623 \times 10^{2}$

$b = 7.633\,333\,333 \times 10^{-1}$

$b_{61} = 4.006\,073\,948 \times 10^{-1}$

$b_{71} = 8.636\,081\,627 \times 10^{-2}$

$b_{81} = -8.532\,322\,921 \times 10^{-1}$

$b_{82} = 3.460\,208\,861 \times 10^{-1}$

3.7.1.3 *Sub-regions 3 and 4*

$C_{00} = -6.839\,900\,000 \times 10^{0}$

$C_{01} = -1.722\,604\,200 \times 10^{-2}$

$C_{02} = -7.771\,750\,390 \times 10^{0}$

$C_{03} = 4.204\,607\,520 \times 10^{0}$

$C_{04} = -2.768\,070\,380 \times 10^{0}$

$C_{05} = 2.104\,197\,070 \times 10^{0}$

$C_{06} = -1.146\,495\,880 \times 10^{0}$

$C_{07} = 2.231\,380\,850 \times 10^{-1}$

$C_{08} = 1.162\,503\,630 \times 10^{-1}$

$C_{09} = -8.209\,005\,440 \times 10^{-2}$

$C_{010} = 1.941\,292\,390 \times 10^{-2}$

$C_{011} = -1.694\,705\,760 \times 10^{-3}$

$C_{012} = -4.311\,577\,033 \times 10^{0}$

$C_{11} = 7.086\,360\,850 \times 10^{-1}$

$C_{12} = 1.236\,794\,550 \times 10^{1}$

$C_{13} = -1.203\,890\,040 \times 10^{1}$

$C_{14} = 5.404\,374\,220 \times 10^{0}$

$C_{15} = -9.938\,650\,430 \times 10^{-1}$

$C_{16} = 6.275\,231\,820 \times 10^{-2}$

$C_{17} = -7.747\,430\,160 \times 10^{0}$

$C_{21} = -4.298\,850\,920 \times 10^{0}$

$C_{22} = 4.314\,305\,380 \times 10^{1}$

$C_{23} = -1.416\,193\,130 \times 10^{1}$

$C_{24} = 4.041\,724\,590 \times 10^{0}$

$C_{25} = 1.555\,463\,260 \times 10^{0}$

$C_{26} = -1.665\,689\,350 \times 10^{0}$

$C_{27} = 3.248\,811\,580 \times 10^{-1}$

$C_{28} = 2.936\,553\,250 \times 10^{1}$

$C_{31} = 7.948\,418\,420 \times 10^{-6}$

$C_{32} = 8.088\,597\,470 \times 10^{1}$

$C_{33} = -8.361\,533\,800 \times 10^{1}$

$C_{34} = 3.586\,365\,170 \times 10^{1}$

$C_{35} = 7.518\,959\,540 \times 10^{0}$

$C_{36} = -1.261\,606\,400 \times 10^{1}$

$C_{37} = 1.097\,174\,620 \times 10^{0}$

$C_{38} = 2.121\,454\,920 \times 10^{0}$

$C_{39} = -5.465\,295\,660 \times 10^{-1}$

$C_{310} = 8.328\,754\,130 \times 10^{0}$

$C_{40} = 2.759\,717\,760 \times 10^{-6}$

$C_{41} = -5.090\,739\,850 \times 10^{-4}$

$C_{50} = 2.106\,363\,320 \times 10^{2}$

$C_{60} = 5.528\,935\,335 \times 10^{-2}$

$C_{61} = -2.336\,365\,955 \times 10^{-1}$

$C_{62} = 3.697\,071\,420 \times 10^{-1}$

$C_{63} = -2.596\,415\,470 \times 10^{-1}$

$C_{64} = 6.828\,087\,013 \times 10^{-2}$

$C_{70} = -2.571\,600\,553 \times 10^{2}$

$C_{71} = -1.518\,783\,715 \times 10^{2}$

$C_{72} = 2.220\,723\,208 \times 10^{1}$

$C_{73} = -1.802\,039\,570 \times 10^{2}$

$C_{74} = 2.357\,096\,220 \times 10^{3}$

$C_{75} = -1.462\,335\,698 \times 10^{4}$

$C_{76} = 4.542\,916\,630 \times 10^{4}$

$C_{77} = -7.053\,556\,432 \times 10^{4}$

$C_{78} = 4.381\,571\,428 \times 10^{4}$

3.7.1.4 *Subregion 4*

$D_{30} = -1.717\,616\,747 \times 10^{0}$

$D_{31} = 3.526\,389\,875 \times 10^{0}$

$D_{32} = -2.690\,899\,373 \times 10^{0}$

$D_{33} = 9.070\,982\,605 \times 10^{-1}$

$D_{34} = -1.138\,791\,156 \times 10^{-1}$

$D_{40} = 1.301\,023\,613 \times 10^{0}$

$D_{41} = -2.642\,777\,743 \times 10^{0}$

$D_{42} = 1.996\,765\,362 \times 10^{0}$

$D_{43} = -6.661\,557\,013 \times 10^{-1}$

$D_{44} = 8.270\,860\,589 \times 10^{-2}$

$D_{50} = 3.426\,663\,535 \times 10^{-4}$

$D_{51} = -1.236\,521\,258 \times 10^{-3}$

$D_{52} = 1.155\,018\,309 \times 10^{-3}$

3.7.1.5 *Saturation line*

$k_1 = -7.691\,234\,564 \times 10^{0}$

$k_2 = -2.608\,023\,696 \times 10^{1}$

$k_3 = -1.681\,706\,546 \times 10^{2}$

$k_4 = 6.423\,285\,504 \times 10^{1}$

$k_5 = -1.189\,646\,225 \times 10^{2}$

$k_6 = 4.167\,117\,320 \times 10^{0}$

$k_7 = 2.097\,506\,760 \times 10^{1}$

$k_8 = 10^{9}$

$k_9 = 6$

3.7.1.6 *Boundary between subregions 2 and 3*

$L = 7.160\,997\,524 \times 10^{0}$

A derived form of the L-function and the values of the resulting derived constants are given in **3.8.2**.

3.7.2 *Expressions for Values of Derived Constants*

$\theta_t = 27\,316/64\,730 \qquad \beta_2 = 10\,000/2\,212$

$\theta_1 = 62\,315/64\,730 \qquad \beta_1 = \beta_K(\theta_1)$

$\theta_2 = 86\,315/64\,730 \qquad \beta_t = \beta_K(\theta_t)$

$\theta_3 = 107\,315/64\,730 \qquad I_1 = R_1\, T_{c1}/(p_{c1}\, v_{c1})$

The numerical values of the above 8 constants are given to 10 digits in **3.8.1**.

The constants α_0 and α_1 may be taken each to be zero. If it be desired that the calculated values of the internal energy and entropy at the reference state (the liquid phase at the triple point) each approximate to zero with the highest precision, then these constants should be evaluated, to suit the computer in use, by means of the following expressions:

$$\alpha_0 = [-\zeta_A + \beta(\partial\zeta_A/\partial\beta)_\theta + \theta(\partial\zeta_A/\partial\theta)_\beta]_{\theta=\theta_t,\ \beta=\beta_t}$$

$$\alpha_1 = [-(\partial\zeta_A/\partial\theta)_\beta]_{\theta=\theta_t,\ \beta=\beta_t}$$

3.8 Derived Constants

3.8.1 *Numerical Values of Derived Constants*

$$\alpha_0 = 0,\ \alpha_1 = 0$$

$$\beta_2 = 4.520\,795\,660 \times 10^0$$

$$\theta_t = 4.219\,990\,731 \times 10^{-1}$$

$$\theta_1 = 9.626\,911\,787 \times 10^{-1}$$

$$\theta_2 = 1.333\,462\,073 \times 10^0$$

$$\theta_3 = 1.657\,886\,606 \times 10^0$$

$$I_1 = 4.260\,321\,148 \times 10^0$$

$$\beta_1 = 7.475\,191\,707 \times 10^{-1}$$

$$\beta_t = 2.763\,311\,032 \times 10^{-5}$$

For convenience the adopted constant quantities are repeated here :

$$T_{c1} = 647.3\ \text{K} \qquad \text{(exactly)}$$

$$p_{c1} = 22\,120\,000\ \text{N/m}^2 \qquad \text{(exactly)}$$

$$v_{c1} = 0.00\,317\ \text{m}^3/\text{kg} \qquad \text{(exactly)}$$

whence the constant quantities given below are derived :

$$p_{c1}\, v_{c1} = 70\,120.4\ \text{J/kg} \qquad \text{(exactly)}$$

$$p_{c1}\, v_{c1}/T_{c1} = 108.327\,514\,3\ \text{J/kg K}$$

3.8.2 *Derived Form of the L-Function and Values of the Constants Relating Thereto*

When the L-function is rearranged to give

$$\beta_L = \beta_L(\theta)$$
$$= L_0 + L_1\theta + L_2\theta^2$$

and consequently

$$\frac{d\beta_L}{d\theta} = \beta_L'$$
$$= \beta_L'(\theta)$$
$$= L_1 + 2L_2\theta,$$

then the derived constants L_0, L_1 and L_2 have the numerical values

$$L_0 = 1.574\,373\,327 \times 10^1$$

$$L_1 = -3.417\,061\,978 \times 10^1$$

$$L_2 = 1.931\,380\,707 \times 10^1$$

3.9 Derived Functions

3.9.1 *Subregion 1*

Reduced volume,

$$v/v_{c1} = \chi_1$$
$$= (\partial\zeta_A/\partial\beta)_\theta$$
$$\chi_1 = A_{11}a_5 Z^{-5/17} + \{A_{12} + A_{13}\theta + A_{14}\theta^2 + A_{15}(a_6 - \theta)^{10} + A_{16}(a_7 + \theta^{19})^{-1}\} - (a_8 + \theta^{11})^{-1}(A_{17} + 2A_{18}\beta + 3A_{19}\beta^2) - A_{20}\theta^{18}(a_9 + \theta^2)\{-3(a_{10} + \beta)^{-4} + a_{11}\} + 3A_{21}(a_{12} - \theta)\beta^2 + 4A_{22}\theta^{-20}\beta^3$$

where

$$Z = Y + (a_3 Y^2 - 2a_4\theta + 2a_5\beta)^{1/2}$$

$$Y = 1 - a_1\theta^2 - a_2\theta^{-6}$$

Reduced entropy,

$$s/(p_{c1}\, v_{c1}/T_{c1}) = \sigma_1$$
$$= -(\partial\zeta_A/\partial\theta)_\beta - \alpha_1$$

$$\sigma_1 = -\alpha_1 + A_0 \ln\theta - \sum_{\nu=2}^{10}(\nu - 1)A_\nu\theta^{\nu-2} + A_{11}\left[\left\{\frac{5}{12}Z - (a_3 - 1)Y\right\}Y' + a_4\right]Z^{-5/17} + \{-A_{13} - 2A_{14}\theta + 10A_{15}(a_6 - \theta)^9 + 19A_{16}(a_7 + \theta^{19})^{-2}\theta^{18}\}\beta - 11(a_8 + \theta^{11})^{-2}\theta^{10}(A_{17}\beta + A_{18}\beta^2 + A_{19}\beta^3) + A_{20}\theta^{17}(18a_9 + 20\theta^2)\{(a_{10} + \beta)^{-3} + a_{11}\beta\} + A_{21}\beta^3 + 20A_{22}\theta^{-21}\beta^4$$

where

$$Y' = -2a_1\theta + 6a_2\theta^{-7}$$

Reduced enthalpy,

$$h_1(p_{c1}\, v_{c1}) = \epsilon_1$$

$$= \zeta_A + \alpha_0 + \alpha_1\theta + \theta\sigma_1$$

$$\epsilon_1 = \alpha_0 + A_0\theta - \sum_{\nu=1}^{10} (\nu - 2) A_\nu \theta^{\nu-1}$$

$$+ A_{11}\left[Z\left\{ 17\left(\frac{Z}{29} - \frac{Y}{12}\right) + 5\theta\frac{Y'}{12}\right\} + a_4\theta - (a_3 - 1)\theta Y Y' \right] Z^{-5/17}$$

$$+ \{A_{12} - A_{14}\theta^2 + A_{15}(9\theta + a_6)(a_6 - \theta)^9 + A_{16}(20\theta^{19} + a_7)(a_7 + \theta^{19})^{-2}\}\beta$$

$$- (12\theta^{11} + a_8)(a_8 + \theta^{11})^{-2}(A_{17}\beta + A_{18}\beta^2 + A_{19}\beta^3)$$

$$+ A_{20}\theta^{18}(17a_9 + 19\theta^2)\{(a_{10} + \beta)^{-3} + a_{11}\beta\} + A_{21}a_{12}\beta^3 + 21\, A_{22}\theta^{-20}\beta^4$$

3.9.2 *Subregion 2*

Reduced volume,

$$v/v_{c1} = \chi_2$$

$$= (\partial\zeta_B/\partial\beta)_\theta$$

$$\chi_2 = I_1\theta/\beta - \sum_{\mu=1}^{5} \mu\beta^{\mu-1} \sum_{\nu=1}^{n(\mu)} B_{\mu\nu} X^{z(\mu,\nu)} - \sum_{\mu=6}^{8} \frac{(\mu - 2)\beta^{1-\mu} \sum_{\nu=1}^{n(\mu)} B_{\mu\nu} X^{z(\mu,\nu)}}{\left\{\beta^{2-\mu} + \sum_{\lambda=1}^{\ell(\mu)} b_{\mu\lambda} X^{x(\mu,\lambda)}\right\}^2}$$

$$+ 11\left(\frac{\beta}{\beta_L}\right)^{10} \sum_{\nu=0}^{6} B_{9\nu} X^\nu$$

where

$$\chi = exp\,\{b(1 - \theta)\}$$

$\beta_L = \beta_L(\theta)$, the expression for which is given in 3.3.2.2. and the numbers of terms $n(\mu)$ and $\ell(\mu)$, and the exponents $z(\mu, \nu)$ and $x(\mu, \lambda)$, are listed in 3.6.2.

Reduced entropy, $s/(p_{c1}\, v_{c1}/\, T_{c1}) = \sigma_2 = -(\partial\zeta_B/\partial\theta)_\beta - \alpha_1$

$$\sigma_2 = -\alpha_1 - I_1 \ln\beta + B_0 \ln\theta - \sum_{\nu=1}^{5}(\nu-1)B_{0\nu}\theta^{\nu-2} - b\sum_{\mu=1}^{5}\beta^{\mu}\sum_{\nu=1}^{m(\mu)} z(\mu,\nu)B_{\mu\nu}X^{z(\mu,\nu)}$$

$$-b\sum_{\mu=6}^{8}\left[\frac{\sum_{\nu=1}^{m(\mu)} B_{\mu\nu}X^{z(\mu,\nu)}\left(z(\mu,\nu) - \frac{\sum_{\lambda=1}^{\ell(\mu)} x(\mu,\lambda)b_{\mu\lambda}X^{x(\mu,\lambda)}}{\beta^{2-\mu} + \sum_{\lambda=1}^{\ell(\mu)} b_{\mu\lambda}X^{x(\mu,\lambda)}}\right)}{\beta^{2-\mu} + \sum_{\lambda=1}^{\ell(\mu)} b_{\mu\lambda}X^{x(\mu,\lambda)}}\right]$$

$$+\beta\left(\frac{\beta}{\beta_L}\right)^{10}\sum_{\nu=0}^{6}\left[\left\{\frac{10\beta_L'}{\beta_L} + \nu b\right\}B_{9\nu}X^{\nu}\right]$$

Reduced enthalpy,

$$h/(p_{c1}\,v_{c1}) = \epsilon_2 = \zeta_B + \alpha_0 + \alpha_1\theta + \theta\sigma_2$$

$$\epsilon_2 = \alpha_0 + B_0\theta - \sum_{\nu=1}^{5} B_{0\nu}(\nu-2)\theta^{\nu-1} - \sum_{\mu=1}^{5}\beta^{\mu}\sum_{\nu=1}^{m(\mu)} B_{\mu\nu}(1 + z(\mu,\nu)b\theta)X^{z(\mu,\nu)}$$

$$-\sum_{\mu=6}^{8}\left[\frac{\sum_{\nu=1}^{m(\mu)} B_{\mu\nu}X^{z(\mu,\nu)}\left([1 + z(\mu,\nu)b\theta] - \frac{b\theta\sum_{\lambda=1}^{\ell(\mu)} x(\mu,\lambda)b_{\mu\lambda}X^{x(\mu,\lambda)}}{\beta^{2-\mu} + \sum_{\lambda=1}^{\ell(\mu)} b_{\mu\lambda}X^{x(\mu,\lambda)}}\right)}{\beta^{2-\mu} + \sum_{\lambda=1}^{\ell(\mu)} b_{\mu\lambda}X^{x(\mu,\lambda)}}\right]$$

$$+\beta\left(\frac{\beta}{\beta_L}\right)^{10}\sum_{\nu=0}^{6}\left[\left\{1 + \theta\left(\frac{10\beta_L}{\beta_L} + \nu b\right)\right\}B_{9\nu}X^{\nu}\right]$$

3.9.3 *Subregion 3*

Reduced pressure,

$$p/p_{c1} = \beta_3 = -(\partial\psi_C/\partial\chi)_\theta$$

$$\beta_3 = -\left\{C_{01} + \sum_{\nu=2}^{11}(1-\nu)\,C_{0\nu}\chi^{-\nu} + C_{012}\chi^{-1}\right\}$$

$$-\left\{C_{11} + \sum_{\nu=2}^{6}(1-\nu)\,C_{1\nu}\chi^{-\nu} + C_{17}\chi^{-1}\right\}(\theta-1)$$

$$-\left\{C_{21} + \sum_{\nu=2}^{7}(1-\nu)\,C_{2\nu}\chi^{-\nu} + C_{28}\chi^{-1}\right\}(\theta-1)^2$$

$$-\left\{C_{31} + \sum_{\nu=2}^{9}(1-\nu)\,C_{3\nu}\chi^{-\nu} + C_{310}\chi^{-1}\right\}(\theta-1)^3$$

$$+5\,C_{41}\chi^{-6}\theta^{-23}(\theta-1) - 6\chi^{5}\sum_{\nu=0}^{4} C_{6\nu}\theta^{-2-\nu}$$

Reduced entropy

$$s/(p_{c1}\, v_{c1}/T_{c1}) = \sigma_3 = -(\partial\psi_C/\partial\theta)_\chi - \alpha_1$$

$$\begin{aligned}
\sigma_3 = &-\alpha_1 - \left\{C_{11}\chi + \sum_{\nu=2}^{6} C_{1\nu}\chi^{1-\nu} + C_{17}\ln\chi + C_{50}\right\} \\
&- 2\left\{C_{21}\chi + \sum_{\nu=2}^{7} C_{2\nu}\chi^{1-\nu} + C_{28}\ln\chi\right\}(\theta-1) \\
&- 3\left\{C_{31}\chi + \sum_{\nu=2}^{9} C_{3\nu}\chi^{1-\nu} + C_{310}\ln\chi\right\}(\theta-1)^2 \\
&+ (C_{40} + C_{41}\chi^{-5})(22\,\theta^{-23} - 23\theta^{-24}) - C_{50}\ln\theta + \chi^6 \sum_{\nu=0}^{4}\{(\nu+2)\,C_{6\nu}\theta^{-3-\nu}\} \\
&- \sum_{\nu=0}^{8}\{(\nu+1)\,C_{7\nu}(\theta-1)^\nu\}
\end{aligned}$$

Reduced enthalpy,

$$h/(p_{c1}\, v_{c1}) = \epsilon_3 = \psi_C + \alpha_0 + \alpha_1\theta + \theta\sigma_3 + \chi\beta_3$$

$$\begin{aligned}
\epsilon_3 = &\alpha_0 + \left\{(C_{00} - C_{012} - C_{50}) - C_{11}\chi + \sum_{\nu=2}^{11}\nu\, C_{0\nu}\chi^{1-\nu}\right. \\
&\left. - \sum_{\nu=2}^{6} C_{1\nu}\chi^{1-\nu} + (C_{012} - C_{17})\ln\chi\right\} + \left\{(-C_{17} - C_{50}) - (C_{11} + 2C_{21})\chi\right. \\
&\left. + \sum_{\nu=2}^{6}(\nu-1)\,C_{1\nu}\chi^{1-\nu} - 2\sum_{\nu=2}^{7} C_{2\nu}\chi^{1-\nu} - 2C_{28}\ln\chi\right\}(\theta-1) \\
&+ \left\{-C_{28} - (2C_{21} + 3C_{31})\chi + \sum_{\nu=2}^{7}(\nu-2)C_{2\nu}\chi^{1-\nu}\right. \\
&\left. - 3\sum_{\nu=2}^{9} C_{3\nu}\chi^{1-\nu} - (C_{28} + 3C_{310})\ln\chi\right\}(\theta-1)^2 \\
&+ \left\{-C_{310} - 3C_{31}\chi + \sum_{\nu=2}^{9}(\nu-3)C_{3\nu}\chi^{1-\nu} - 2C_{310}\ln\chi\right\}(\theta-1)^3 \\
&+ (23C_{40} + 28C_{41}\chi^{-5})\theta^{-22} - (24C_{40} + 29C_{41}\chi^{-5})\theta^{-23} \\
&+ \chi^6\sum_{\nu=0}^{4}\{(\nu-3)C_{6\nu}\theta^{-2-\nu}\} - \sum_{\nu=0}^{8}\{C_{7\nu}(1+\nu\theta)(\theta-1)^\nu\}
\end{aligned}$$

3.9.4 *Subregion 4*

Reduced pressure,

$$p/p_{c1} = \beta_4 = \beta_3 - (\partial\psi_D/\partial\chi)_\theta$$

$$\beta_4 = \beta_3 + \sum_{\mu=3}^{4}\sum_{\nu=0}^{4}\nu D_{\mu\nu}y^\mu\chi^{-\nu-1} - y^{32}\sum_{\nu=0}^{2}\nu D_{5\nu}\chi^{\nu-1}$$

Reduced entropy,

$$s/(p_{c1}\, v_{c1}/T_{c1}) = \sigma_4 = \sigma_3 - (\partial\psi_D/\partial\theta)_\chi$$

$$\sigma_4 = \sigma_3 + \frac{\sum_{\mu=3}^{4}\sum_{\nu=0}^{4}\mu D_{\mu\nu}y^{\mu-1}\chi^{-\nu} + 32y^{31}\sum_{\nu=0}^{2}D_{5\nu}\chi^\nu}{1-\theta_1}$$

Reduced enthalpy,

$$h/(p_{c1} v_{c1}) = \epsilon_4 = \epsilon_3 + \psi_D + (\sigma_4 - \sigma_3)\theta + (\beta_4 - \beta_3)\chi$$

$$\epsilon_4 = \epsilon_3 \quad \sum_{\mu=3}^{4} \sum_{\nu=0}^{4} D_{\mu\nu}\{(1 - \mu + \nu)\, y + \mu/(1 - \theta_1)\}\, y^{\mu-1}\chi^{-\nu}$$

$$- y^{31} \sum_{\nu=0}^{2} D_{5\nu}\, \{(31 + \nu)y - 32/(1 - \theta_1)\}\chi^{\nu}$$

NOTE: In the three derived expressions for subregion 4: $y = (1 - \theta)/(1 - \theta_1)$

3.10 Cautionary Notes

3.10.1 *Discontinuities at Boundaries Between Subregions* — It should be noted that there are discontinuities in property values at the boundary between subregions 2 and 3 and at the boundary between subregions 1 and 4. Nevertheless, for the specific volume, specific enthalpy and specific free enthalpy, the discontinuities are less than the maximum values which the First Meeting of the International Formulation Committee (Prague, 1965) recommended should not be exceeded. However, when values of the specific entropy are listed at 5-degree intervals, there are four points on the boundary between subregions 2 and 3 at which the discontinuity has a value of 0.3 J/kg K, and one point having a value of 0.4 J/kg K, compared with the recommended maximum acceptable value of 0.2 J/kg K.

For the specific heat-capacity, the discontinuities at the boundary between subregions 1 and 4 do not exceed the recommended maximum value of 1 percent, but at the boundary between subregions 2 and 3 they are in general in excess of 1 percent, the greatest discontinuity being 6.5 percent.

The magnitudes of these discontinuites are not significant industrially.

3.10.2 *Precautions to be observed in numerical computation* — The precautions and techniques of numerical analysis will be well known to users of this formulation. Two points, however, warrant comment.

1. It will be clearly evident that, in order to attain an adequately precise result from numerical inversion in subregions 3 and 4, it is necessary to control the pressure error or the volume error, or both, within appropriate bounds. When pressure alone is controlled, very severe conditions must be imposed (possibly as fine as 1 part in 10^6 or, near the critical point, much finer).

2. Note should be taken of the fact that errors may arise if finite-difference techniques be used with too small an interval.

3.11 Formulation for Specific Heat Capacity, C_p

3.11.1 *Subregion 1*

Reduced specific isobaric heat-capacity :

$$\phi = \frac{c_p T_{c1}}{p_{c1} v_{c1}}$$

$$\phi_1 = -\theta\left(\frac{\partial^2 \zeta_A}{\partial \theta^2}\right)_\beta$$

where

$$\left(\frac{\partial^2 \zeta_A}{\partial \theta^2}\right)_\beta = -A_0\theta^{-1} + \sum_{\nu=0}^{7}(\nu+1)(\nu+2)A_{\nu+3}\theta^{\nu}$$

$$+ A_{11}\left\{\left(\frac{12}{29}Z - Y\right)\left[Z^{-5/17}\frac{d^2Z}{d\theta^2} - \frac{5}{17}Z^{-22/17}\left(\frac{dZ}{d\theta}\right)^2\right]\right.$$

$$\left. + \left(\frac{24}{29}\frac{dZ}{d\theta} - 2\frac{dY}{d\theta}\right)Z^{-5/17}\frac{dZ}{d\theta} + \left(\frac{17}{29}\frac{d^2Z}{d\theta^2} - \frac{17}{12}\frac{d^2Y}{d\theta^2}\right)Z^{12/17}\right\}$$

$$+ \beta\{2A_{14} + 90A_{15}(a_6 - \theta)^8 + 722A_{16}\theta^{36}(a_7 + \theta^{19})^{-3} - 342A_{16}\theta^{17}(a_7 + \theta^{19})^{-2}\}$$

$$- \{242\theta^{20}(a_8 + \theta^{11})^{-3} - 110\theta^9(a_8 + \theta^{11})^{-2}\}(A_{17}\beta + A_{18}\beta^2 + A_{19}\beta^3)$$

$$- A_{20}\theta^{16}(306a_9 + 380\theta^2)\{(a_{10} + \beta)^3 + a_{11}\beta\} + 420A_{22}\theta^{22}\beta^4$$

and

$$Z = Y + (a_3 Y^2 - 2a_4\theta + 2a_5\beta)^{1/2},$$

$$Y = 1 - a_1\theta^2 - a_2\theta^{-6},$$

$$\frac{dY}{d\theta} = -2a_1\theta + 6a_2\theta^{-7}, \qquad \frac{d^2Y}{d\theta^2} = -2a_1 - 42a_2\theta^{-8},$$

$$\frac{dZ}{d\theta} = \frac{dY}{d\theta} + \left(a_3 Y\frac{dY}{d\theta} - a_4\right)\left(a_3 Y^2 - 2a_4\theta + 2a_5\beta\right)^{-1/2}$$

$$\frac{d^2Z}{d\theta^2} = \frac{d^2Y}{d\theta^2} + a_3(a_3 Y^2 - 2a_4\theta + 2a_5\beta)^{-1/2}\left\{\left(\frac{dY}{d\theta}\right)^2 + Y\frac{d^2Y}{d\theta^2}\right\}$$

$$- \left(a_3 Y\frac{dY}{d\theta} - a_4\right)^2(a_3 Y^2 - 2a_4\theta + 2a_5\beta)^{-3/2}$$

3.11.2 *Subregion 2*

Reduced specific isobaric heat-capacity:

$$\phi = \frac{c_p T_{c1}}{p_{c1} v_{c1}}$$

$$\phi_2 = -\theta\left(\frac{\partial^2 \zeta_B}{\partial \theta^2}\right)_\beta$$

where

$$\left(\frac{\partial^2 \zeta_B}{\partial \theta^2}\right)_\beta = -B_0\theta^{-1} + 2B_{03} + 6B_{04}\theta + 12B_{05}\theta^2 - (169B_{11}X^{13} + 9B_{12}X^3)b^2\beta$$

$$-(324B_{21}X^{18} + 4B_{22}X^2 + B_{23}X)b^2\beta^2 - (324B_{31}X^{18} + 100B_{32}X^{10})b^2\beta^3$$

$$-(625B_{41}X^{25} + 196B_{42}X^{14})b^2\beta^4 - (1024B_{51}X^{32} + 784B_{52}X^{28} + 576B_{53}X^{24})b^2\beta^5$$

$$-\sum_{\nu=6}^{8}\left[\frac{F_{\nu 2}}{G_{\nu 0}} - \frac{2F_{\nu 1}G_{\nu 1} + F_{\nu 0}G_{\nu 2}}{(G_{\nu 0})^2} + 2F_{\nu 0}\frac{(G_{\nu 1})^2}{(G_{\nu 0})^3}\right]$$

$$+\left(\frac{\beta}{\beta_L}\right)^{11}\left[\left\{\frac{110}{\beta_L}\left(\frac{d\beta_L}{d\theta}\right)^2 - 10\frac{d^2\beta_L}{d\theta^2}\right\}\sum_{\nu=0}^{6} B_{9\nu}X^\nu\right.$$

$$\left. + 20\,b\frac{d\beta_L}{d\theta}\sum_{\nu=0}^{6}\nu B_{9\nu}X^\nu + b^2\beta_L\sum_{\nu=0}^{6}\nu^2 B_{9\nu}X^\nu\right]$$

and

$$X = e^{b(1-\theta)}$$

$$\beta_L = \beta_L(\theta) = \frac{(\theta_2 - \theta)\beta_1 + (\theta - \theta_1)\beta_2 - L(\theta_2 - \theta)(\theta - \theta_1)}{\theta_2 - \theta_1} = L_0 + L_1\theta + L_2\theta^2$$

$$F_{60} = (B_{61}X^{12} + B_{62}X^{11})\beta^4 \qquad G_{60} = 1 + b_{61}X^{14}\beta^4$$

$$F_{70} = (B_{71}X^{24} + B_{72}X^{18})\beta^5 \qquad G_{70} = 1 + b_{71}X^{19}\beta^5$$

$$F_{80} = (B_{81}X^{24} + B_{82}X^{14})\beta^6 \qquad G_{80} = 1 + (b_{81}X^{54} + b_{82}X^{27})\beta^6$$

$$F_{\nu 1} = dF_{\nu 0}/d\theta \qquad F_{\nu 2} = d^2F_{\nu 0}/d\theta^2$$

$$G_{\nu 1} = dG_{\nu 0}/d\theta \qquad G_{\nu 2} = d^2G_{\nu 0}/d\theta^2$$

3.11.3 *Subregion 3*

Reduced specific Isobaric heat-capacity:

$$\phi = \frac{c_p T_{c1}}{p_{c1} v_{c1}}$$

$$\phi_3 = -\theta\left(\frac{\partial^2 \psi_C}{\partial \theta^2}\right)_\chi + \theta\left(\frac{\partial^2 \psi_C}{\partial \chi \partial \theta}\right)^2 \Big/ \left(\frac{\partial^2 \psi_C}{\partial \chi^2}\right)_\theta$$

where

$$\left(\frac{\partial^2\psi_C}{\partial\theta^2}\right)_\chi = 2\left(C_{21}\chi + \sum_{\nu=2}^{7} C_{2\nu}\chi^{1-\nu} + C_{28}\ln\chi\right)$$

$$+ 6\left(C_{31}\chi + \sum_{\nu=2}^{9} C_{3\nu}\chi^{1-\nu} + C_{310}\ln\chi\right)(\theta - 1)$$

$$+ (C_{40} + C_{41}\chi^{-5})(506\theta - 552)\theta^{-25} + C_{50}\theta^{-1}$$

$$+ \chi^6 \sum_{\nu=0}^{4}(\nu + 2)(\nu + 3)C_{6\nu}\theta^{-\nu-4} + \sum_{\nu=0}^{8}\nu(\nu + 1)C_{7\nu}(\theta - 1)^{\nu-1}$$

$$\frac{\partial^2\psi_C}{\partial\chi\partial\theta} = C_{11} + \sum_{\nu=2}^{6}(1 - \nu)C_{1\nu}\chi^{-\nu} + C_{17}\chi^{-1}$$

$$+ 2\left(C_{21} + \sum_{\nu=2}^{7}(1 - \nu)C_{2\nu}\chi^{-\nu} + C_{28}\chi^{-1}\right)(\theta - 1)$$

$$+ 3\left(C_{31} + \sum_{\nu=2}^{9}(1 - \nu)C_{3\nu}\chi^{-\nu} + C_{310}\chi^{-1}\right)(\theta - 1)^2$$

$$- 5C_{41}\chi^{-6}(23 - 22\theta)\theta^{-24} - 6\chi^5 \sum_{\nu=0}^{4}(\nu + 2)C_{6\nu}\theta^{-\nu-3}$$

$$\left(\frac{\partial^2\psi_C}{\partial\chi^2}\right)_\theta = \sum_{\nu=2}^{11}\nu(\nu - 1)C_{0\nu}\chi^{-\nu-1} - C_{012}\chi^{-2}$$

$$+ \left(\sum_{\nu=2}^{6}\nu(\nu - 1)C_{1\nu}\chi^{-\nu-1} - C_{17}\chi^{-2}\right)(\theta - 1)$$

$$+ \left(\sum_{\nu=2}^{7}\nu(\nu - 1)C_{2\nu}\chi^{-\nu-1} - C_{28}\chi^{-2}\right)(\theta - 1)^2$$

$$+ \left(\sum_{\nu=2}^{9}\nu(\nu - 1)C_{3\nu}\chi^{-\nu-1} - C_{310}\chi^{-2}\right)(\theta - 1)^3$$

$$+ 30C_{41}\chi^{-7}(\theta - 1)\theta^{-23} + 30\chi^4 \sum_{\nu=0}^{4} C_{6\nu}\theta^{-\nu-2}$$

3.11.4 *Subregion 4*

Reduced specific isobaric heat-capacity:

$$\phi = \frac{c_p T_{c1}}{p_{c1} v_{c1}}$$

$$\phi_4 = -\theta\left(\frac{\partial^2\psi}{\partial\theta^2}\right)_\chi + \theta\left(\frac{\partial^2\psi}{\partial\chi\partial\theta}\right)^2 \Big/ \left(\frac{\partial^2\psi}{\partial\chi^2}\right)_\theta \qquad \text{where } \psi = \psi_C + \psi_D$$

$$= -\theta\left(\frac{\partial^2\psi_C}{\partial\theta^2}\right)_\chi - \theta\left(\frac{\partial^2\psi_D}{\partial\theta^2}\right)_\chi + \theta\left[\frac{\partial^2\psi_C}{\partial\chi\partial\theta} + \frac{\partial^2\psi_D}{\partial\chi\partial\theta}\right]^2 \Big/ \left[\left(\frac{\partial^2\psi_C}{\partial\chi^2}\right)_\theta + \left(\frac{\partial^2\psi_D}{\partial\chi^2}\right)_\theta\right]$$

where

$$\left(\frac{\partial^2\psi_D}{\partial\theta^2}\right)_\chi = \frac{1}{(1-\theta_1)^2}\left[\sum_{\mu=3}^{4}\sum_{\nu=0}^{4}\mu(\mu-1)D_{\mu\nu}y^{\mu-2}\chi^{-\nu} + 992y^{30}\sum_{\nu=0}^{2}D_{5\nu}\chi^{\nu}\right]$$

$$\frac{\partial^2\psi_D}{\partial\chi\partial\theta} = \frac{1}{(1-\theta_1)}\left[\sum_{\mu=3}^{4}\sum_{\nu=0}^{4}\mu\nu D_{\mu\nu}y^{\mu-1}\chi^{-\nu-1} - 32y^{31}\sum_{\nu=0}^{2}\nu D_{5\nu}\chi^{\nu-1}\right]$$

$$\left(\frac{\partial^2\psi_D}{\partial\chi^2}\right)_\theta = \sum_{\mu=3}^{4}\sum_{\nu=0}^{4}\nu(\nu+1)D_{\mu\nu}y^{\mu}\chi^{-\nu-2} + y^{32}\sum_{\nu=0}^{2}\nu(\nu-1)D_{5\nu}\chi^{\nu-2}$$

and

$$y = (1-\theta)/(1-\theta_1)$$

3.12 Dynamic Viscosity Formulations — The 1975 IAPS Release on Dynamic Viscosity contained a skeleton table prepared from a critically evaluated experimental data reduced to a uniform grid and an interpolating equation which interpolates to the skeleton table data within the permissible tolerances. The IAPS recommended formulation for dynamic viscosity μ is presented here:

$$\mu = \mu_0 \exp\left[\frac{\rho}{\rho^*}\sum_{i=0}^{5}\sum_{j=0}^{4} b_{ij}\left(\frac{T^*}{T}-1\right)^i \times\left(\frac{\rho}{\rho^*}-1\right)^j\right] \quad (1)$$

where

$$\frac{\mu_0}{10^{-6}\text{Pa.s}} = \left(\frac{T}{T^*}\right)^{1/2}\left[\sum_{k=0}^{3}a_k\left(\frac{T^*}{T}\right)^k\right]^{-1} \quad (2)$$

The constants in equations (1) and (2) are given by

$T^* = 647.27$ K

$\rho^* = 317.763$ kg/m^3

$a_0 = 0.018\,1583$

$a_1 = 0.017\,7624$

$a_2 = 0.010\,5287$

$a_3 = -0.003\,6744$

Here, ρ stands for the density and T stands for the absolute temperature on the 68 International Practical Temperature Scale (IPTS). The coefficients b_{ij} are given in Table 1.

The correlating equation (1) for μ is valid in the range

$$0 < t < 800°\text{C}$$

in temperature and

$$0 < \rho < 1\,050 \text{ kg/m}^3$$

in density which corresponds to an approximate pressure range

$$0 < p < 100 \text{ MPa.}$$

When the dynamic viscosity values are desired as a function of pressure and temperature, equation (1), has to be complemented with an equation of state. The recommended equation for this purpose is the 1968 IFC Formulation for Scientific and General Use.

The widely used equation of state for the thermodynamic properties of water and steam is the 1967 IFC Formulation for Industrial Use. When the

TABLE 1 COEFFICIENT b_{ij}

	j =	0	1	2	3	4
i	0	0.501 938	0.235 622	−0.274 637	0.145 831	−0.027 044 8
	1	0.162 888	0.789 393	−0.743 539	0.263 129	−0.025 309 3
	2	−0.130 356	0.673 665	−0.959 456	0.347 247	−0.026 775 8
	3	0.907 919	1.207 552	−0.687 343	0.213 486	−0.082 290 4
	4	−0.551 119	0.067 066 5	−0.497 089	0.100 754	0.060 225 3
	5	0.146 543	−0.084 337 0	0.195 286	−0.032 932	−0.020 259 5

values of density are substituted in equation (1) from the 1967 Formulation for Industrial Use, the dynamic viscosity values generated may exhibit a marginal difference of at most 0.3 percent except in a region close to the critical point where the differences may be even larger. However, for all industrial applications the deviations are negligible.

3.13 The Thermal Conductivity Formulations — The 1977 IAPS Release on Thermal Conductivity of Water and Steam contained a skeleton table and two interpolating equations, one for industrial use and the other for scientific use. The two formulations produce essentially equivalent values of thermal conductivity except in a region around the critical point where there is an anomalous singular behaviour of the thermodynamic and transport properties.

The 1977 IAPS formulation for scientific use incorporates in it to a certain extent the anomaly near the critical point. The formulation for industrial use with which the data for thermal conductivity λ has been generated for the ISI Steam Tables is reproduced as follows :

$$\lambda = \lambda_0 + \bar{\lambda} + \Delta\lambda \tag{3}$$

where

$$\lambda_0 = \left(\frac{T}{T^*}\right)^{1/2} \sum_{i=0}^{3} a_i \left(\frac{T}{T^*}\right)^i \tag{4}$$

$$\bar{\lambda} = b_0 + b_1\left(\frac{\rho}{\rho^*}\right) + b_2 \exp\left[B_1\left(\frac{\rho}{\rho^*} + B_2\right)^2\right] \tag{5}$$

$$\Delta\lambda = \left[d_1\left(\frac{T^*}{T}\right)^{10} + d_2\right]\left(\frac{\rho}{\rho^*}\right)^{18} \times \exp\left[C_1\left\{1 - \left(\frac{\rho}{\rho^*}\right)^{28}\right\}\right] + d_3 S\left(\frac{\rho}{\rho^*}\right)^Q \exp\left[\frac{Q}{R}\left\{1 - \left(\frac{\rho}{\rho^*}\right)^R\right\}\right] + d_4 \exp\left[C_2\left(\frac{T}{T^*}\right)^{1.5} + C_3\left(\frac{\rho^*}{\rho}\right)^5\right] \tag{6}$$

$$Q = 2.0 + C_5\,(\Delta T^*)^{-0.6} \tag{7}$$

$$R = Q + 1.0 \tag{8}$$

$$S = \begin{cases} (\Delta T^*)^{-1.0}, & \text{for } T \geq T^* \\ C_6(\Delta T^*)^{-0.6}, & \text{for } T < T^* \end{cases} \tag{9}$$

$$\Delta T^* = \left|\frac{T}{T^*} - 1.0\right| + C_4 \tag{10}$$

Numerical values of the constants

$T^* = 647.3$ K
$a_0 = 1.028\,11 \times 10^{-2}$ W/(m.K)
$a_1 = 2.996\,21 \times 10^{-2}$ W/(m.K)
$a_2 = 1.561\,46 \times 10^{-2}$ W/(m.K)
$a_3 = -4.224\,64 \times 10^{-3}$ W/(m.K)
$b_0 = -3.970\,70 \times 10^{-1}$ W/(m.K)
$b_1 = 4.003\,02 \times 10^{-1}$ W/(m.K)
$b_2 = 1.060\,00$ W/(m.K)
$B_1 = -1.715\,87 \times 10^{-1}$
$B_2 = 2.392\,19$
$\rho^* = 317.7$ kg/m^3
$d_1 = 7.013\,09 \times 10^{-2}$ W/(m.K)
$d_2 = 1.185\,20 \times 10^{-2}$ W/(m.K)
$d_3 = 1.699\,37 \times 10^{-3}$ W/(m.K)
$d_4 = -1.020\,00$ W/(m.K)
$C_1 = 6.428\,57 \times 10^{-1}$
$C_2 = -4.117\,17$
$C_3 = -6.179\,37$
$C_4 = 3.089\,76 \times 10^{-3}$
$C_5 = 8.229\,94 \times 10^{-2}$
$C_6 = 1.009\,32 \times 10^{1}$

When the thermal conductivity values are desired as a function of pressure and temperature, then the density has to be calculated from the 1967 IFC Formulation for Industrial Use.

3.14 Kinematic Viscosity, Thermal Diffusivity and Prandtl Number — The kinematic viscosity, thermal conductivity and Prandtl Number are properties dependant on dynamic viscosity and thermal conductivity. They are calculated using the relations

Kinematic viscosity $\nu = \mu/\rho$

Thermal diffusivity $\alpha = \lambda/\rho C_p$

Prandtl number $Pr = \mu C_p/\lambda$

Where C_p stands for the specific heat capacity at constant pressure and can be obtained from an equation of state. The formulations for industrial use discussed in the earlier sections are used for evaluating the individual properties μ, ρ, C_p and λ. However, for a smooth representation of the Prandtl number as a function of pressure and temperature, it is suggested to use the 1975 IAPS release for dynamic viscosity, the 1977 IAPS release on thermal conductivity for scientific use in

conjunction with the fundamental equation for thermodynamic properties. This holds good for thermal diffusivity as well.

3.15 Internationally Recommended Interpolation Equation for Surface Tension (1975)— The data of International Skeleton Table (1975) for the surface tension σ which are shown in the Table 12G are reproduced by the following Internationally Recommended Interpolation Equation (1975) within attached tolerances respectively.

$$\sigma = 0.2358 \left(1 - \frac{T}{T_c}\right)^{1.256} \left\{1 - 0.625 \left(1 - \frac{T}{T_c}\right)\right\}$$

where

σ = Surface tension of water, N/m;

T = Temperature, K; and,

T_c = 647.15 K (Critical temperature).

3.16 Laplace Coefficient— The value of Laplace coefficient a which is needed in the field of heat transfer, in chemical engineering can be calculated by the following equation:

$$a = \sqrt{\sigma / \{g(\rho' - \rho'')\}}$$

$$= \sqrt{\sigma \, \nu' \, \nu'' \, \{g(\nu'' - \nu')\}}$$

where

a = Laplace coefficient, m;

g = 9.806 65 m/s^2 (standard acceleration due to gravity);

ρ = Density, kg/m^3; and

ν = $1/\rho$ = Specific volume, m^3/kg.

TABLE 1A SATURATION PROPERTIES PRESSURE TABLE

p mmHg	p kPa	t °C	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
1	.133	-19.302	.0010068	878.62	993.26	.0011381	-82.56	2466.0	2548.6	-.3135	9.7251
2	.267	-10.902	.0010025	453.81	997.48	.0022036	-46.30	2481.5	2527.8	-.1730	9.4652
3	.400	-5.693	.0010011	308.52	998.94	.0032413	-24.12	2491.1	2515.2	-.0892	9.3143
4	.533	-1.854	.0010004	234.70	999.58	.0042608	-7.87	2498.1	2506.0	-.0289	9.2078
5	.667	1.210	.0010001	189.87	999.86	.0052669	5.06	2503.8	2498.7	.0185	9.1255
6	.800	3.772	.0010000	159.69	999.96	.0062622	15.84	2508.5	2492.6	.0576	9.0585
7	.933	5.980	.0010000	137.96	999.96	.0072486	25.13	2512.5	2487.4	.0910	9.0020
8	1.067	7.926	.0010001	121.55	999.89	.0082272	33.29	2516.1	2482.8	.1201	8.9531
9	1.200	9.667	.0010002	108.71	999.77	.0091991	40.60	2519.3	2478.7	.1461	8.9101
10	1.333	11.246	.0010004	98.376	999.63	.010165	47.22	2522.2	2475.0	.1694	8.8717
11	1.467	12.691	.0010005	89.882	999.48	.011126	53.27	2524.8	2471.6	.1906	8.8370
12	1.600	14.025	.0010007	82.772	999.31	.012081	58.86	2527.3	2468.4	.2101	8.8054
13	1.733	15.265	.0010009	76.731	999.13	.013033	64.05	2529.5	2465.5	.2282	8.7764
14	1.867	16.423	.0010011	71.533	998.94	.013980	68.90	2531.7	2462.8	.2449	8.7495
15	2.000	17.511	.0010012	67.012	998.76	.014923	73.45	2533.6	2460.2	.2606	8.7246
16	2.133	18.538	.0010014	63.042	998.57	.015862	77.74	2535.5	2457.8	.2754	8.7013
17	2.266	19.509	.0010016	59.529	998.38	.016799	81.81	2537.3	2455.5	.2893	8.6794
18	2.400	20.432	.0010018	56.396	998.19	.017732	85.67	2539.0	2453.3	.3025	8.6588
19	2.533	21.311	.0010020	53.585	998.00	.018662	89.34	2540.6	2451.2	.3150	8.6393
20	2.666	22.150	.0010022	51.049	997.81	.019589	92.85	2542.1	2449.2	.3269	8.6208
21	2.800	22.954	.0010024	48.748	997.62	.020514	96.21	2543.6	2447.4	.3382	8.6033
22	2.933	23.724	.0010026	46.651	997.44	.021436	99.43	2545.0	2445.5	.3491	8.5866
23	3.066	24.465	.0010028	44.732	997.25	.022355	102.53	2546.3	2443.8	.3595	8.5706
24	3.200	25.178	.0010029	42.969	997.07	.023272	105.51	2547.6	2442.1	.3695	8.5554
25	3.333	25.866	.0010031	41.344	996.89	.024187	108.38	2548.9	2440.5	.3791	8.5407
26	3.466	26.530	.0010033	39.840	996.71	.025100	111.16	2550.1	2438.9	.3884	8.5267
27	3.600	27.172	.0010035	38.445	996.53	.026011	113.84	2551.2	2437.4	.3973	8.5132
28	3.733	27.794	.0010037	37.148	996.36	.026920	116.44	2552.4	2435.9	.4060	8.5002
29	3.866	28.396	.0010038	35.937	996.19	.027827	118.96	2553.4	2434.5	.4143	8.4876
30	4.000	28.981	.0010040	34.805	996.02	.028731	121.41	2554.5	2433.1	.4224	8.4755
31	4.133	29.549	.0010042	33.744	995.85	.029635	123.78	2555.5	2431.8	.4303	8.4638
32	4.266	30.102	.0010043	32.748	995.68	.030536	126.09	2556.5	2430.4	.4379	8.4525
33	4.400	30.639	.0010045	31.811	995.51	.031436	128.34	2557.5	2429.2	.4453	8.4415
34	4.533	31.163	.0010047	30.927	995.35	.032334	130.52	2558.5	2427.9	.4525	8.4309
35	4.666	31.673	.0010048	30.093	995.19	.033231	132.66	2559.4	2426.7	.4595	8.4205

TABLE 1A SATURATION PROPERTIES PRESSURE TABLE

p mmHg	p kPa	t °C	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
36	4.800	32.171	.0010050	29.304	995.03	.034126	134.74	2560.3	2425.5	.4663	8.4105
37	4.933	32.657	.0010052	28.556	994.87	.035019	136.77	2561.2	2424.4	.4730	8.4008
38	5.066	33.132	.0010053	27.847	994.71	.035911	138.75	2562.0	2423.3	.4795	8.3913
39	5.200	33.596	.0010055	27.173	994.56	.036802	140.69	2562.9	2422.2	.4858	8.3821
40	5.333	34.050	.0010056	26.532	994.41	.037691	142.59	2563.7	2421.1	.4920	8.3731
41	5.466	34.494	.0010058	25.921	994.26	.038579	144.44	2564.5	2420.0	.4980	8.3643
42	5.600	34.929	.0010059	25.339	994.11	.039466	146.26	2565.3	2419.0	.5039	8.3557
43	5.733	35.355	.0010061	24.783	993.96	.040351	148.04	2566.0	2418.0	.5097	8.3474
44	5.866	35.772	.0010062	24.251	993.81	.041235	149.79	2566.8	2417.0	.5153	8.3392
45	5.999	36.182	.0010064	23.743	993.67	.042118	151.50	2567.5	2416.0	.5209	8.3313
46	6.133	36.583	.0010065	23.256	993.52	.042999	153.17	2568.2	2415.1	.5263	8.3235
47	6.266	36.977	.0010067	22.789	993.38	.043880	154.82	2568.9	2414.1	.5316	8.3159
48	6.399	37.364	.0010068	22.342	993.24	.044759	156.44	2569.6	2413.2	.5368	8.3084
49	6.533	37.744	.0010069	21.912	993.10	.045638	158.02	2570.3	2412.3	.5419	8.3011
50	6.666	38.117	.0010071	21.499	992.96	.046515	159.58	2571.0	2411.4	.5469	8.2940
55	7.333	39.892	.0010078	19.652	992.29	.050885	167.00	2574.2	2407.2	.5707	8.2603
60	7.999	41.533	.0010084	18.106	991.65	.055230	173.86	2577.1	2403.3	.5925	8.2296
65	8.666	43.059	.0010090	16.792	991.03	.059553	180.24	2579.8	2399.6	.6128	8.2014
70	9.333	44.488	.0010096	15.660	990.44	.063856	186.21	2582.4	2396.2	.6316	8.1753
75	9.999	45.831	.0010102	14.676	989.87	.068139	191.83	2584.8	2393.0	.6492	8.1511
80	10.666	47.099	.0010108	13.811	989.33	.072405	197.13	2587.0	2389.9	.6658	8.1285
85	11.332	48.301	.0010113	13.046	988.80	.076654	202.15	2589.2	2387.0	.6815	8.1072
90	11.999	49.444	.0010119	12.363	988.28	.080887	206.93	2591.2	2384.3	.6963	8.0872
95	12.666	50.534	.0010124	11.750	987.79	.085106	211.49	2593.1	2381.6	.7104	8.0683
100	13.332	51.575	.0010129	11.197	987.30	.089310	215.84	2595.0	2379.1	.7238	8.0504
120	15.999	55.339	.0010147	9.4339	985.50	.10600	231.59	2601.6	2370.0	.7720	7.9869
140	18.665	58.601	.0010164	8.1623	983.87	.12251	245.23	2607.3	2362.0	.8134	7.9334
160	21.332	61.486	.0010180	7.2007	982.37	.13888	257.31	2612.3	2355.0	.8496	7.8871
180	23.998	64.080	.0010194	6.4472	980.98	.15511	268.17	2616.8	2348.6	.8819	7.8464
200	26.664	66.439	.0010207	5.8405	979.68	.17122	278.05	2620.8	2342.8	.9111	7.8101
220	29.331	68.606	.0010220	5.3411	978.46	.18723	287.13	2624.5	2337.4	.9378	7.7773
240	31.997	70.613	.0010232	4.9227	977.31	.20314	295.54	2628.0	2332.4	.9623	7.7474
260	34.664	72.482	.0010244	4.5668	976.21	.21897	303.38	2631.1	2327.8	.9850	7.7199
280	37.330	74.234	.0010255	4.2604	975.17	.23472	310.72	2634.1	2323.4	1.0062	7.6945
300	39.997	75.884	.0010265	3.9937	974.18	.25039	317.64	2636.9	2319.2	1.0261	7.6709

TABLE 1A SATURATION PROPERTIES PRESSURE TABLE

p mmHg	p kPa	t °C	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
320	42.663	77.443	.0010275	3.7594	973.23	.26600	324.18	2639.5	2315.3	1.0448	7.6469
340	45.329	78.922	.0010285	3.5519	972.31	.28154	330.39	2642.0	2311.6	1.0624	7.6282
360	47.996	80.330	.0010294	3.3668	971.43	.29702	336.30	2644.3	2308.0	1.0792	7.6087
380	50.662	81.673	.0010303	3.2005	970.58	.31245	341.94	2646.5	2304.6	1.0951	7.5902
400	53.329	82.959	.0010312	3.0505	969.76	.32782	347.34	2648.7	2301.3	1.1103	7.5728
420	55.995	84.192	.0010320	2.9142	968.96	.34314	352.52	2650.7	2298.2	1.1248	7.5562
440	58.662	85.376	.0010329	2.7901	968.19	.35842	357.50	2652.6	2295.1	1.1387	7.5404
460	61.328	86.517	.0010337	2.6763	967.44	.37364	362.29	2654.5	2292.2	1.1520	7.5253
480	63.995	87.616	.0010344	2.5718	966.71	.38883	366.91	2656.3	2289.4	1.1648	7.5108
500	66.661	88.678	.0010352	2.4754	966.00	.40397	371.38	2658.0	2286.6	1.1772	7.4970
520	69.327	89.705	.0010359	2.3862	965.31	.41908	375.70	2659.7	2284.0	1.1891	7.4837
540	71.994	90.700	.0010367	2.3034	964.64	.43414	379.88	2661.3	2281.4	1.2006	7.4709
560	74.660	91.664	.0010374	2.2263	963.98	.44917	383.94	2662.8	2278.9	1.2118	7.4586
580	77.327	92.600	.0010381	2.1544	963.34	.46417	387.88	2664.3	2276.4	1.2225	7.4467
600	79.993	93.510	.0010387	2.0871	962.71	.47913	391.71	2665.8	2274.1	1.2330	7.4352
620	82.660	94.395	.0010394	2.0241	962.10	.49406	395.44	2667.2	2271.7	1.2431	7.4241
640	85.326	95.256	.0010400	1.9648	961.49	.50895	399.07	2668.5	2269.5	1.2530	7.4134
660	87.993	96.095	.0010407	1.9091	960.90	.52382	402.60	2669.9	2267.3	1.2626	7.4030
680	90.659	96.914	.0010413	1.8565	960.33	.53865	406.05	2671.2	2265.1	1.2719	7.3929
700	93.325	97.712	.0010419	1.8068	959.76	.55346	409.42	2672.4	2263.0	1.2810	7.3831
720	95.992	98.492	.0010425	1.7598	959.20	.56824	412.71	2673.7	2260.9	1.2898	7.3736
740	98.658	99.255	.0010431	1.7153	958.66	.58300	415.92	2674.8	2258.9	1.2984	7.3644
760	101.325	100.000	.0010437	1.6730	958.12	.59773	419.06	2676.0	2256.9	1.3069	7.3554
780	103.991	100.729	.0010443	1.6328	957.60	.61243	422.14	2677.1	2255.0	1.3151	7.3466
800	106.658	101.443	.0010448	1.5946	957.08	.62711	425.15	2678.3	2253.1	1.3231	7.3381

TABLE 1B SATURATION PROPERTIES PRESSURE TABLE

p MPa	t °C	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
.0010	6.9828	.0010001	129.21	999.93	.0077394	29.34	2514.4	2485.0	.1060	8.9767
.0015	13.036	.0010006	87.982	999.43	.011366	54.71	2525.5	2470.7	.1957	8.8288
.0020	17.513	.0010012	67.006	998.76	.014924	73.46	2533.6	2460.2	.2607	8.7246
.0025	21.096	.0010020	54.256	998.05	.018431	88.45	2540.2	2451.7	.3119	8.6440
.0030	24.100	.0010027	45.667	997.34	.021898	101.00	2545.6	2444.6	.3544	8.5785
.0035	26.694	.0010033	39.479	996.67	.025331	111.85	2550.4	2438.5	.3907	8.5232
.0040	28.963	.0010040	34.802	996.01	.028734	121.41	2554.5	2433.1	.4225	8.4755
.0045	31.035	.0010046	31.141	995.39	.032112	129.99	2558.2	2428.2	.4507	8.4335
.0050	32.898	.0010052	28.194	994.79	.035469	137.77	2561.6	2423.8	.4763	8.3960
.0055	34.605	.0010058	25.771	994.22	.038804	144.91	2564.7	2419.8	.4995	8.3621
.0060	36.183	.0010064	23.741	993.67	.042121	151.50	2567.5	2416.0	.5209	8.3312
.0065	37.651	.0010069	22.016	993.13	.045422	157.64	2570.2	2412.5	.5407	8.3029
.0070	39.025	.0010074	20.531	992.62	.048707	163.38	2572.6	2409.2	.5591	8.2767
.0075	40.316	.0010079	19.239	992.13	.051977	168.77	2574.9	2406.2	.5763	8.2523
.0080	41.534	.0010084	18.105	991.65	.055235	173.86	2577.1	2403.2	.5925	8.2296
.0085	42.689	.0010089	17.100	991.19	.058479	178.69	2579.2	2400.5	.6079	8.2082
.0090	43.787	.0010094	16.204	990.74	.061712	183.28	2581.1	2397.9	.6224	8.1881
.0095	44.833	.0010098	15.400	990.30	.064934	187.65	2583.0	2395.3	.6361	8.1691
.0100	45.833	.0010102	14.675	989.87	.068145	191.83	2584.8	2392.9	.6493	8.1511
.011	47.710	.0010111	13.416	989.06	.074538	199.68	2588.1	2388.4	.6738	8.1177
.012	49.446	.0010119	12.362	988.28	.080894	206.94	2591.2	2384.3	.6963	8.0872
.013	51.062	.0010126	11.466	987.54	.087217	213.70	2594.0	2380.3	.7172	8.0592
.014	52.574	.0010133	10.694	986.83	.093509	220.02	2596.7	2376.7	.7367	8.0334
.015	53.997	.0010140	10.023	986.15	.099772	225.97	2599.2	2373.2	.7549	8.0093
.016	55.341	.0010147	9.4331	985.50	.10601	231.59	2601.6	2370.0	.7721	7.9869
.017	56.615	.0010154	8.9110	984.87	.11222	236.92	2603.8	2366.9	.7883	7.9658
.018	57.826	.0010160	8.4452	984.26	.11841	241.99	2605.9	2363.9	.8036	7.9460
.019	58.982	.0010166	8.0272	983.67	.12458	246.83	2607.9	2361.1	.8182	7.9272
.020	60.086	.0010172	7.6498	983.10	.13072	251.45	2609.9	2358.4	.8321	7.9094
.021	61.145	.0010178	7.3073	982.55	.13685	255.88	2611.7	2355.8	.8453	7.8925
.022	62.162	.0010183	6.9951	982.01	.14296	260.14	2613.5	2353.3	.8581	7.8764
.023	63.139	.0010189	6.7093	981.48	.14905	264.23	2615.2	2350.9	.8702	7.8611
.024	64.082	.0010194	6.4467	980.97	.15512	268.18	2616.8	2348.6	.8820	7.8464
.025	64.992	.0010199	6.2045	980.48	.16117	271.99	2618.3	2346.4	.8932	7.8323
.026	65.871	.0010204	5.9803	979.99	.16721	275.67	2619.9	2344.2	.9041	7.8188

TABLE 1B SATURATION PROPERTIES PRESSURE TABLE

p MPa	t °C	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
.027	66.722	.0010209	5.7724	979.52	.17324	279.24	2621.3	2342.1	.9146	7.8058
.028	67.547	.0010214	5.5788	979.06	.17925	282.69	2622.7	2340.0	.9248	7.7933
.029	68.347	.0010219	5.3982	978.61	.18525	286.05	2624.1	2338.1	.9346	7.7812
.030	69.124	.0010223	5.2293	978.16	.19123	289.30	2625.4	2336.1	.9441	7.7695
.032	70.615	.0010232	4.9223	977.31	.20316	295.55	2628.0	2332.4	.9623	7.7474
.034	72.029	.0010241	4.6504	976.48	.21504	301.48	2630.4	2328.9	.9795	7.7266
.036	73.374	.0010249	4.4078	975.69	.22687	307.12	2632.6	2325.5	.9958	7.7070
.038	74.658	.0010257	4.1900	974.92	.23866	312.50	2634.8	2322.3	1.0113	7.6884
.040	75.886	.0010265	3.9934	974.18	.25041	317.65	2636.9	2319.2	1.0261	7.6709
.045	78.743	.0010284	3.5762	972.42	.27962	329.64	2641.7	2312.0	1.0603	7.6307
.050	81.345	.0010301	3.2402	970.79	.30862	340.56	2646.0	2305.4	1.0912	7.5947
.055	83.737	.0010317	2.9636	969.25	.33743	350.61	2649.9	2299.3	1.1194	7.5623
.060	85.954	.0010333	2.7318	967.81	.36607	359.93	2653.6	2293.6	1.1454	7.5327
.065	88.021	.0010347	2.5346	966.44	.39454	368.62	2656.9	2288.3	1.1696	7.5055
.070	89.959	.0010361	2.3647	965.14	.42288	376.77	2660.1	2283.3	1.1921	7.4804
.075	91.785	.0010375	2.2169	963.90	.45108	384.45	2663.0	2278.6	1.2131	7.4570
.080	93.512	.0010387	2.0870	962.71	.47917	391.72	2665.8	2274.1	1.2330	7.4352
.085	95.152	.0010400	1.9719	961.57	.50713	398.63	2668.4	2269.8	1.2518	7.4147
.090	96.713	.0010412	1.8692	960.47	.53499	405.21	2670.9	2265.6	1.2696	7.3954
.095	98.204	.0010423	1.7770	959.41	.56275	411.49	2673.2	2261.7	1.2865	7.3771
.10	99.632	.0010434	1.6937	958.39	.59041	417.51	2675.4	2257.9	1.3027	7.3598
.11	102.32	.0010455	1.5492	956.44	.64548	428.84	2679.6	2250.8	1.3330	7.3277
.12	104.81	.0010476	1.4281	954.60	.70022	439.36	2683.4	2244.1	1.3609	7.2984
.13	107.13	.0010495	1.3251	952.87	.75467	449.19	2687.0	2237.8	1.3868	7.2715
.14	109.32	.0010513	1.2363	951.21	.80885	458.42	2690.3	2231.9	1.4109	7.2465
.15	111.37	.0010530	1.1590	949.64	.86279	467.13	2693.4	2226.2	1.4336	7.2234
.16	113.32	.0010547	1.0911	948.13	.91650	475.38	2696.2	2220.9	1.4550	7.2017
.17	115.17	.0010563	1.0309	946.68	.97000	483.22	2699.0	2215.7	1.4752	7.1813
.18	116.93	.0010579	.97723	945.29	1.0233	490.70	2701.5	2210.8	1.4944	7.1622
.19	118.62	.0010594	.92900	943.95	1.0764	497.85	2704.0	2206.1	1.5127	7.1440
.20	120.23	.0010608	.88544	942.65	1.1294	504.70	2706.3	2201.6	1.5301	7.1268
.21	121.78	.0010623	.84590	941.39	1.1822	511.28	2708.5	2197.2	1.5468	7.1105
.22	123.27	.0010636	.80984	940.17	1.2349	517.62	2710.6	2193.0	1.5627	7.0949
.23	124.71	.0010650	.77681	938.99	1.2873	523.73	2712.6	2188.9	1.5781	7.0800
.24	126.09	.0010663	.74645	937.84	1.3397	529.63	2714.5	2184.9	1.5929	7.0657

TABLE 1B SATURATION PROPERTIES PRESSURE TABLE

p MPa	t °C	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
.25	127.43	.0010675	.71844	936.73	1.3919	535.34	2716.4	2181.0	1.6071	7.0520
.26	128.73	.0010688	.69251	935.64	1.4440	540.87	2718.2	2177.3	1.6209	7.0389
.27	129.98	.0010700	.66844	934.57	1.4960	546.24	2719.9	2173.6	1.6342	7.0262
.28	131.20	.0010712	.64604	933.54	1.5479	551.44	2721.5	2170.1	1.6471	7.0140
.29	132.39	.0010724	.62513	932.52	1.5997	556.50	2723.1	2166.6	1.6595	7.0023
.30	133.54	.0010735	.60556	931.53	1.6514	561.43	2724.7	2163.2	1.6716	6.9909
.31	134.66	.0010746	.58722	930.56	1.7029	566.23	2726.1	2159.9	1.6834	6.9799
.32	135.75	.0010757	.56999	929.61	1.7544	570.90	2727.6	2156.7	1.6948	6.9693
.33	136.82	.0010768	.55376	928.68	1.8058	575.46	2729.0	2153.5	1.7059	6.9589
.34	137.86	.0010779	.53846	927.77	1.8572	579.92	2730.3	2150.4	1.7168	6.9489
.35	138.87	.0010789	.52400	926.87	1.9084	584.27	2731.6	2147.4	1.7273	6.9392
.36	139.86	.0010799	.51032	925.99	1.9595	588.53	2732.9	2144.4	1.7376	6.9297
.37	140.83	.0010809	.49736	925.13	2.0106	592.69	2734.1	2141.4	1.7476	6.9205
.38	141.78	.0010819	.48505	924.28	2.0616	596.76	2735.3	2138.6	1.7574	6.9116
.39	142.71	.0010829	.47336	923.45	2.1126	600.76	2736.5	2135.7	1.7670	6.9028
.40	143.62	.0010839	.46222	922.62	2.1635	604.67	2737.6	2133.0	1.7764	6.8943
.41	144.52	.0010848	.45162	921.82	2.2143	608.51	2738.7	2130.2	1.7856	6.8860
.42	145.39	.0010858	.44150	921.02	2.2650	612.27	2739.8	2127.5	1.7945	6.8779
.43	146.25	.0010867	.43184	920.24	2.3157	615.97	2740.9	2124.9	1.8033	6.8700
.44	147.09	.0010876	.42260	919.46	2.3663	619.60	2741.9	2122.3	1.8120	6.8623
.45	147.92	.0010885	.41375	918.70	2.4169	623.16	2742.9	2119.7	1.8204	6.8547
.46	148.73	.0010894	.40528	917.95	2.4674	626.67	2743.9	2117.2	1.8287	6.8473
.47	149.53	.0010903	.39716	917.21	2.5179	630.11	2744.8	2114.7	1.8368	6.8401
.48	150.31	.0010911	.38936	916.48	2.5683	633.50	2745.7	2112.2	1.8448	6.8330
.49	151.08	.0010920	.38188	915.76	2.6187	636.83	2746.6	2109.8	1.8527	6.8260
.50	151.84	.0010928	.37468	915.05	2.6690	640.12	2747.5	2107.4	1.8604	6.8192
.52	153.33	.0010945	.36108	913.65	2.7695	646.53	2749.3	2102.7	1.8754	6.8059
.54	154.76	.0010961	.34846	912.29	2.8699	652.76	2750.9	2098.1	1.8899	6.7932
.56	156.16	.0010977	.33671	910.96	2.9700	658.81	2752.5	2093.7	1.9040	6.7809
.58	157.52	.0010993	.32574	909.65	3.0700	664.69	2754.0	2089.3	1.9176	6.7690
.60	158.84	.0011009	.31547	908.38	3.1698	670.42	2755.5	2085.0	1.9308	6.7575
.62	160.12	.0011024	.30585	907.13	3.2696	676.01	2756.9	2080.9	1.9437	6.7464
.64	161.38	.0011039	.29681	905.91	3.3692	681.46	2758.2	2076.8	1.9562	6.7357
.66	162.60	.0011053	.28830	904.71	3.4687	686.78	2759.5	2072.7	1.9684	6.7252
.68	163.79	.0011068	.28027	903.53	3.5680	691.98	2760.8	2068.8	1.9802	6.7150

TABLE 1B SATURATION PROPERTIES PRESSURE TABLE

p MPa	t °C	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
.70	164.96	.0011082	.27268	902.37	3.6673	697.06	2762.0	2064.9	1.9918	6.7052
.72	166.10	.0011096	.26550	901.24	3.7665	702.03	2763.2	2061.1	2.0031	6.6956
.74	167.21	.0011110	.25870	900.12	3.8655	706.90	2764.3	2057.4	2.0141	6.6862
.76	168.30	.0011123	.25224	899.02	3.9645	711.67	2765.4	2053.7	2.0249	6.6771
.78	169.37	.0011137	.24610	897.94	4.0634	716.35	2766.4	2050.1	2.0354	6.6683
.80	170.41	.0011150	.24026	896.88	4.1622	720.94	2767.5	2046.5	2.0457	6.6596
.82	171.44	.0011163	.23469	895.83	4.2609	725.43	2768.5	2043.0	2.0558	6.6511
.84	172.45	.0011176	.22938	894.80	4.3596	729.85	2769.4	2039.6	2.0657	6.6429
.86	173.44	.0011188	.22430	893.78	4.4582	734.19	2770.4	2036.2	2.0753	6.6348
.88	174.41	.0011201	.21945	892.77	4.5569	738.45	2771.3	2032.8	2.0848	6.6269
.90	175.36	.0011213	.21481	891.78	4.6552	742.64	2772.1	2029.5	2.0941	6.6192
.92	176.29	.0011226	.21036	890.81	4.7537	746.76	2773.0	2026.2	2.1033	6.6116
.94	177.21	.0011238	.20610	889.84	4.8520	750.82	2773.8	2023.0	2.1122	6.6042
.96	178.12	.0011250	.20201	888.89	4.9504	754.81	2774.6	2019.8	2.1210	6.5969
.98	179.01	.0011262	.19807	887.95	5.0486	758.74	2775.4	2016.7	2.1297	6.5898
1.00	179.88	.0011274	.19429	887.02	5.1469	762.61	2776.2	2013.6	2.1382	6.5828
1.05	182.02	.0011303	.18545	884.75	5.3923	772.03	2778.0	2005.9	2.1588	6.5659
1.10	184.07	.0011331	.17738	882.54	5.6375	781.12	2779.7	1998.5	2.1786	6.5497
1.15	186.05	.0011359	.16999	880.39	5.8825	789.92	2781.3	1991.3	2.1977	6.5342
1.20	187.96	.0011386	.16320	878.29	6.1274	798.43	2782.7	1984.3	2.2161	6.5194
1.25	189.81	.0011412	.15693	876.24	6.3722	806.69	2784.1	1977.4	2.2338	6.5051
1.30	191.61	.0011438	.15113	874.24	6.6170	814.70	2785.4	1970.7	2.2510	6.4913
1.35	193.35	.0011464	.14574	872.29	6.8616	822.49	2786.6	1964.2	2.2676	6.4780
1.40	195.04	.0011489	.14072	870.37	7.1063	830.07	2787.8	1957.7	2.2837	6.4651
1.45	196.69	.0011514	.13604	868.50	7.3509	837.46	2788.9	1951.4	2.2993	6.4526
1.50	198.29	.0011539	.13166	866.66	7.5955	844.66	2789.9	1945.2	2.3145	6.4406
1.55	199.85	.0011563	.12755	864.85	7.8402	851.69	2790.8	1939.2	2.3292	6.4289
1.60	201.37	.0011586	.12369	863.08	8.0850	858.56	2791.7	1933.2	2.3436	6.4175
1.65	202.86	.0011610	.12005	861.34	8.3298	865.28	2792.6	1927.3	2.3576	6.4065
1.70	204.31	.0011633	.11662	859.63	8.5747	871.84	2793.4	1921.5	2.3713	6.3957
1.75	205.72	.0011656	.11338	857.95	8.8197	878.27	2794.1	1915.9	2.3846	6.3853
1.80	207.11	.0011678	.11032	856.29	9.0648	884.57	2794.8	1910.3	2.3976	6.3751
1.85	208.47	.0011701	.10741	854.66	9.3100	890.75	2795.5	1904.7	2.4103	6.3651
1.90	209.80	.0011723	.10465	853.05	9.5554	896.81	2796.1	1899.3	2.4228	6.3554
1.95	211.10	.0011744	.10203	851.46	9.8009	902.75	2796.7	1893.9	2.4349	6.3459

TABLE 1B SATURATION PROPERTIES PRESSURE TABLE

p MPa	t °C	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
2.00	212.37	.0011766	.099536	849.90	10.047	908.59	2797.2	1888.6	2.4469	6.3367
2.05	213.63	.0011787	.097158	848.36	10.292	914.32	2797.7	1883.4	2.4585	6.3276
2.10	214.85	.0011809	.094890	846.84	10.539	919.96	2798.2	1878.2	2.4700	6.3187
2.15	216.06	.0011830	.092723	845.33	10.785	925.50	2798.6	1873.1	2.4812	6.3100
2.20	217.24	.0011850	.090652	843.85	11.031	930.95	2799.1	1868.1	2.4922	6.3015
2.25	218.41	.0011871	.088669	842.38	11.278	936.32	2799.4	1863.1	2.5030	6.2931
2.30	219.55	.0011892	.086769	840.94	11.525	941.60	2799.8	1858.2	2.5136	6.2849
2.35	220.68	.0011912	.084948	839.50	11.772	946.80	2800.1	1853.3	2.5241	6.2769
2.40	221.78	.0011932	.083199	838.09	12.019	951.93	2800.4	1848.5	2.5343	6.2690
2.45	222.87	.0011952	.081520	836.68	12.267	956.98	2800.7	1843.7	2.5444	6.2612
2.50	223.94	.0011972	.079905	835.30	12.515	961.96	2800.9	1839.0	2.5543	6.2536
2.55	225.00	.0011991	.078352	833.92	12.763	966.87	2801.2	1834.3	2.5640	6.2461
2.60	226.04	.0012011	.076856	832.57	13.011	971.72	2801.4	1829.6	2.5736	6.2387
2.65	227.06	.0012031	.075415	831.22	13.260	976.50	2801.6	1825.1	2.5831	6.2315
2.70	228.07	.0012050	.074025	829.89	13.509	981.22	2801.7	1820.5	2.5924	6.2244
2.75	229.07	.0012069	.072684	828.57	13.758	985.88	2801.9	1816.0	2.6016	6.2173
2.80	230.05	.0012088	.071389	827.26	14.008	990.48	2802.0	1811.5	2.6106	6.2104
2.85	231.01	.0012107	.070138	825.96	14.258	995.03	2802.1	1807.1	2.6195	6.2036
2.90	231.97	.0012126	.068928	824.68	14.508	999.52	2802.2	1802.6	2.6283	6.1969
2.95	232.91	.0012145	.067758	823.40	14.758	1003.96	2802.2	1798.3	2.6370	6.1903
3.00	233.84	.0012163	.066626	822.14	15.009	1008.35	2802.3	1793.9	2.6455	6.1837
3.10	235.67	.0012200	.064467	819.64	15.512	1016.99	2802.3	1785.4	2.6623	6.1709
3.20	237.45	.0012237	.062439	817.18	16.016	1025.43	2802.3	1776.9	2.6786	6.1585
3.30	239.18	.0012274	.060529	814.76	16.521	1033.70	2802.3	1768.6	2.6945	6.1463
3.40	240.88	.0012310	.058728	812.37	17.023	1041.81	2802.1	1760.3	2.7101	6.1344
3.50	242.54	.0012345	.057025	810.02	17.536	1049.76	2802.0	1752.2	2.7253	6.1228
3.60	244.16	.0012381	.055415	807.69	18.046	1057.56	2801.7	1744.2	2.7401	6.1115
3.70	245.75	.0012416	.053888	805.40	18.557	1065.21	2801.4	1736.2	2.7547	6.1004
3.80	247.31	.0012451	.052438	803.14	19.070	1072.74	2801.1	1728.4	2.7689	6.0896
3.90	248.84	.0012486	.051061	800.90	19.585	1080.13	2800.8	1720.6	2.7829	6.0789
4.00	250.33	.0012521	.049749	798.68	20.101	1087.40	2800.3	1712.9	2.7965	6.0685
4.10	251.80	.0012555	.048500	796.49	20.619	1094.56	2799.9	1705.3	2.8099	6.0583
4.20	253.24	.0012589	.047307	794.33	21.138	1101.60	2799.4	1697.8	2.8231	6.0482
4.30	254.66	.0012623	.046168	792.18	21.660	1108.54	2798.9	1690.3	2.8360	6.0383
4.40	256.05	.0012657	.045079	790.06	22.183	1115.38	2798.3	1682.9	2.8487	6.0286

TABLE 1B SATURATION PROPERTIES PRESSURE TABLE

p MPa	t °C	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
4.50	257.41	.0012691	.044037	787.96	22.708	1122.11	2797.7	1675.6	2.8612	6.0191
4.60	258.75	.0012725	.043038	785.87	23.235	1128.76	2797.0	1668.3	2.8735	6.0097
4.70	260.07	.0012758	.042081	783.81	23.764	1135.31	2796.4	1661.1	2.8855	6.0004
4.80	261.37	.0012792	.041161	781.76	24.295	1141.78	2795.7	1653.9	2.8974	5.9913
4.90	262.65	.0012825	.040278	779.73	24.828	1148.16	2794.9	1646.8	2.9091	5.9824
5.00	263.91	.0012858	.039429	777.71	25.362	1154.47	2794.2	1639.7	2.9206	5.9735
5.10	265.15	.0012891	.038611	775.72	25.899	1160.69	2793.4	1632.7	2.9319	5.9648
5.20	266.37	.0012924	.037824	773.73	26.438	1166.85	2792.6	1625.7	2.9431	5.9561
5.30	267.58	.0012957	.037066	771.76	26.979	1172.93	2791.7	1618.8	2.9541	5.9476
5.40	268.76	.0012990	.036334	769.81	27.522	1178.94	2790.8	1611.9	2.9650	5.9392
5.50	269.93	.0013023	.035628	767.86	28.068	1184.89	2789.9	1605.0	2.9757	5.9309
5.60	271.09	.0013056	.034946	765.93	28.615	1190.77	2789.0	1598.2	2.9863	5.9227
5.70	272.22	.0013089	.034288	764.02	29.165	1196.59	2788.0	1591.4	2.9968	5.9146
5.80	273.35	.0013121	.033651	762.11	29.717	1202.35	2787.0	1584.7	3.0071	5.9066
5.90	274.46	.0013154	.033034	760.22	30.271	1208.05	2786.0	1578.0	3.0172	5.8986
6.00	275.55	.0013187	.032438	758.33	30.828	1213.69	2785.0	1571.3	3.0273	5.8908
6.10	276.63	.0013219	.031860	756.46	31.387	1219.28	2784.0	1564.7	3.0372	5.8830
6.20	277.70	.0013252	.031300	754.60	31.949	1224.82	2782.9	1558.0	3.0471	5.8753
6.30	278.75	.0013285	.030757	752.75	32.513	1230.31	2781.8	1551.5	3.0568	5.8677
6.40	279.79	.0013317	.030230	750.90	33.079	1235.75	2780.6	1544.9	3.0664	5.8601
6.50	280.82	.0013350	.029719	749.07	33.648	1241.14	2779.5	1538.4	3.0759	5.8527
6.60	281.84	.0013383	.029223	747.24	34.220	1246.48	2778.3	1531.9	3.0853	5.8452
6.70	282.84	.0013415	.028741	745.42	34.794	1251.78	2777.1	1525.4	3.0946	5.8379
6.80	283.84	.0013448	.028272	743.61	35.371	1257.03	2775.9	1518.9	3.1038	5.8306
6.90	284.82	.0013481	.027817	741.81	35.950	1262.25	2774.7	1512.5	3.1129	5.8233
7.00	285.79	.0013513	.027373	740.02	36.532	1267.42	2773.5	1506.0	3.1219	5.8162
7.10	286.75	.0013546	.026942	738.23	37.117	1272.55	2772.2	1499.6	3.1308	5.8090
7.20	287.70	.0013579	.026522	736.45	37.704	1277.64	2770.9	1493.3	3.1397	5.8020
7.30	288.64	.0013611	.026113	734.67	38.294	1282.69	2769.6	1486.9	3.1484	5.7949
7.40	289.57	.0013644	.025715	732.90	38.888	1287.71	2768.3	1480.5	3.1571	5.7880
7.50	290.50	.0013677	.025327	731.14	39.483	1292.69	2766.9	1474.2	3.1657	5.7811
7.60	291.41	.0013710	.024949	729.39	40.082	1297.64	2765.5	1467.9	3.1742	5.7742
7.70	292.31	.0013743	.024580	727.64	40.684	1302.55	2764.2	1461.6	3.1827	5.7673
7.80	293.21	.0013776	.024220	725.89	41.289	1307.43	2762.8	1455.3	3.1911	5.7606
7.90	294.09	.0013809	.023868	724.15	41.897	1312.28	2761.3	1449.1	3.1994	5.7538

TABLE 1B SATURATION PROPERTIES PRESSURE TABLE

p MPa	t °C	v' m³/kg	v'' m³/kg	ρ kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
8.00	294.97	.0013842	.023525	722.42	42.507	1317.10	2759.9	1442.8	3.2076	5.7471
8.10	295.84	.0013876	.023190	720.68	43.121	1321.88	2758.4	1436.6	3.2158	5.7404
8.20	296.70	.0013909	.022863	718.96	43.738	1326.64	2757.0	1430.3	3.2239	5.7338
8.30	297.55	.0013942	.022544	717.24	44.358	1331.37	2755.5	1424.1	3.2320	5.7272
8.40	298.39	.0013976	.022231	715.52	44.982	1336.07	2754.0	1417.9	3.2399	5.7207
8.50	299.23	.0014009	.021926	713.80	45.608	1340.75	2752.5	1411.7	3.2479	5.7141
8.60	300.06	.0014043	.021627	712.09	46.238	1345.39	2750.9	1405.5	3.2557	5.7076
8.70	300.88	.0014077	.021335	710.39	46.871	1350.01	2749.4	1399.3	3.2636	5.7012
8.80	301.70	.0014111	.021049	708.68	47.508	1354.61	2747.8	1393.2	3.2713	5.6948
8.90	302.51	.0014145	.020769	706.98	48.148	1359.18	2746.2	1387.0	3.2790	5.6884
9.00	303.31	.0014179	.020495	705.29	48.792	1363.73	2744.6	1380.9	3.2867	5.6820
9.10	304.10	.0014213	.020227	703.59	49.438	1368.26	2743.0	1374.7	3.2943	5.6757
9.20	304.89	.0014247	.019964	701.90	50.089	1372.76	2741.4	1368.6	3.3018	5.6694
9.30	305.67	.0014281	.019707	700.21	50.743	1377.24	2739.7	1362.5	3.3093	5.6631
9.40	306.44	.0014316	.019455	698.52	51.401	1381.70	2738.0	1356.3	3.3168	5.6568
9.50	307.21	.0014351	.019208	696.84	52.063	1386.14	2736.4	1350.2	3.3242	5.6506
9.60	307.97	.0014385	.018965	695.16	52.728	1390.56	2734.7	1344.1	3.3315	5.6444
9.70	308.73	.0014420	.018728	693.47	53.397	1394.96	2733.0	1338.0	3.3388	5.6382
9.80	309.48	.0014455	.018494	691.79	54.070	1399.34	2731.2	1331.9	3.3461	5.6321
9.90	310.22	.0014490	.018266	690.12	54.747	1403.70	2729.5	1325.8	3.3534	5.6259
10.00	310.96	.0014526	.018041	688.44	55.428	1408.04	2727.7	1319.7	3.3605	5.6198
10.20	312.42	.0014597	.017605	685.09	56.803	1416.67	2724.2	1307.5	3.3748	5.6076
10.40	313.86	.0014668	.017184	681.74	58.194	1425.24	2720.6	1295.3	3.3889	5.5955
10.60	315.27	.0014741	.016778	678.40	59.603	1433.74	2716.9	1283.1	3.4029	5.5835
10.80	316.67	.0014814	.016385	675.06	61.030	1442.19	2713.1	1270.9	3.4167	5.5715
11.00	318.05	.0014887	.016006	671.72	62.476	1450.57	2709.3	1258.7	3.4304	5.5595
11.20	319.40	.0014962	.015639	668.38	63.941	1458.91	2705.4	1246.5	3.4440	5.5476
11.40	320.74	.0015037	.015284	665.03	65.427	1467.19	2701.5	1234.3	3.4575	5.5358
11.60	322.06	.0015113	.014940	661.69	66.933	1475.43	2697.4	1222.0	3.4708	5.5239
11.80	323.36	.0015190	.014607	658.34	68.462	1483.62	2693.3	1209.7	3.4840	5.5121
12.00	324.65	.0015268	.014283	654.98	70.013	1491.77	2689.2	1197.4	3.4972	5.5002
12.20	325.91	.0015346	.013969	651.62	71.588	1499.88	2684.9	1185.0	3.5102	5.4884
12.40	327.17	.0015426	.013664	648.25	73.187	1507.96	2680.6	1172.6	3.5232	5.4765
12.60	328.40	.0015507	.013367	644.87	74.812	1516.01	2676.1	1160.1	3.5361	5.4646
12.80	329.62	.0015589	.013078	641.48	76.464	1524.02	2671.6	1147.6	3.5488	5.4527

TABLE 1B SATURATION PROPERTIES PRESSURE TABLE

p MPa	t °C	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
13.00	330.63	.0015672	.012797	638.08	78.143	1532.01	2667.0	1135.0	3.5616	5.4408
13.20	332.02	.0015756	.012523	634.67	79.852	1539.97	2662.3	1122.3	3.5742	5.4288
13.40	333.19	.0015842	.012256	631.25	81.589	1547.92	2657.4	1109.5	3.5868	5.4168
13.60	334.36	.0015928	.011996	627.81	83.358	1555.84	2652.5	1096.7	3.5993	5.4047
13.80	335.51	.0016017	.011743	624.35	85.160	1563.75	2647.5	1083.8	3.6118	5.3925
14.00	336.64	.0016106	.011495	620.88	86.994	1571.64	2642.4	1070.7	3.6242	5.3803
14.20	337.76	.0016197	.011253	617.38	88.863	1579.52	2637.1	1057.6	3.6366	5.3679
14.40	338.87	.0016290	.011017	613.86	90.768	1587.40	2631.8	1044.4	3.6490	5.3555
14.60	339.97	.0016385	.010786	610.33	92.710	1595.27	2626.3	1031.0	3.6613	5.3431
14.80	341.06	.0016481	.010561	606.76	94.690	1603.14	2620.7	1017.6	3.6736	5.3305
15.00	342.13	.0016579	.010340	603.17	96.705	1611.01	2615.0	1004.0	3.6859	5.3178
15.20	343.19	.0016679	.010125	599.54	98.770	1618.89	2609.2	990.3	3.6981	5.3051
15.40	344.24	.0016782	.0099136	595.89	100.87	1626.78	2603.3	976.5	3.7104	5.2922
15.60	345.28	.0016886	.0097072	592.19	103.02	1634.68	2597.3	962.6	3.7226	5.2793
15.80	346.31	.0016993	.0095052	588.46	105.21	1642.60	2591.1	948.5	3.7348	5.2663
16.00	347.33	.0017103	.0093075	584.69	107.44	1650.54	2584.9	934.3	3.7471	5.2531
16.20	348.34	.0017216	.0091141	580.87	109.72	1658.51	2578.5	920.0	3.7594	5.2399
16.40	349.33	.0017331	.0089247	576.99	112.05	1666.51	2572.1	905.6	3.7717	5.2267
16.60	350.32	.0017447	.0087386	573.15	114.43	1674.46	2565.5	891.1	3.7842	5.2132
16.80	351.30	.0017570	.0085535	569.17	116.91	1683.00	2558.6	875.6	3.7974	5.1994
17.00	352.26	.0017696	.0083710	565.11	119.46	1691.68	2551.6	859.9	3.8107	5.1855
17.20	353.22	.0017826	.0081912	560.98	122.08	1700.36	2544.4	844.1	3.8240	5.1713
17.40	354.17	.0017961	.0080140	556.76	124.78	1709.00	2537.1	828.1	3.8372	5.1570
17.60	355.11	.0018101	.0078394	552.44	127.56	1717.61	2529.5	811.9	3.8504	5.1425
17.80	356.04	.0018247	.0076674	548.03	130.42	1726.21	2521.8	795.6	3.8635	5.1278
18.00	356.96	.0018399	.0074977	543.52	133.37	1734.82	2513.9	779.1	3.8765	5.1128
18.20	357.87	.0018556	.0073302	538.90	136.42	1743.45	2505.8	762.3	3.8896	5.0975
18.40	358.77	.0018721	.0071647	534.16	139.57	1752.12	2497.4	745.3	3.9028	5.082[illegible]
18.60	359.67	.0018893	.0070009	529.31	142.84	1760.87	2488.8	727.9	3.9160	5.0661
18.80	360.55	.0019072	.0068386	524.33	146.23	1769.70	2479.8	710.1	3.9294	5.0498
19.00	361.43	.0019260	.0066775	519.20	149.76	1778.65	2470.6	692.0	3.9429	5.0332
19.20	362.30	.0019458	.0065173	513.93	153.44	1787.75	2461.1	673.3	3.9566	5.0160
19.40	363.16	.0019666	.0063575	508.49	157.29	1797.03	2451.1	654.1	3.9706	4.9983
19.60	364.02	.0019886	.0061978	502.86	161.35	1806.55	2440.7	634.2	3.9849	4.9800
19.80	364.86	.0020120	.0060377	497.01	165.63	1816.34	2429.8	613.5	3.9996	4.9610

TABLE 1B SATURATION PROPERTIES PRESSURE TABLE

p MPa	t °C	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
20.00	365.70	.0020370	.0058766	490.91	170.17	1826.47	2418.4	591.9	4.0149	4.9412
20.20	366.53	.0020639	.0057138	484.51	175.01	1837.03	2406.2	569.2	4.0307	4.9204
20.40	367.36	.0020931	.0055485	477.75	180.23	1848.13	2393.3	545.1	4.0474	4.8984
20.60	368.17	.0021252	.0053794	470.54	185.89	1859.89	2379.4	519.5	4.0651	4.8750
20.80	368.98	.0021609	.0052051	462.76	192.12	1872.50	2364.2	491.7	4.0841	4.8498
21.00	369.78	.0022015	.0050235	454.23	199.07	1886.25	2347.6	461.3	4.1048	4.8223
21.20	370.58	.0022488	.0048314	444.67	206.98	1901.53	2328.9	427.4	4.1279	4.7917
21.40	371.37	.0023061	.0046239	433.64	216.27	1919.01	2307.4	388.4	4.1543	4.7569
21.60	372.15	.0023793	.0043918	420.28	227.70	1939.95	2281.5	341.6	4.1861	4.7154
21.80	372.92	.0024832	.0041151	402.70	243.01	1967.24	2248.0	280.8	4.2276	4.6622
22.00	373.69	.0026714	.0037279	374.34	268.25	2011.13	2195.6	184.5	4.2947	4.5799
22.12	374.15	.0031700	.0031700	315.46	315.46	2107.37	2107.4	.0	4.4429	4.4429

TABLE 2 SATURATION PROPERTIES TEMPERATURE TABLE

t °C	p MPa	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
0	.0006108	.0010002	206.31	999.78	.0048472	-.04	2501.6	2501.6	-.0002	9.1577
.01	.0006112	.0010002	206.16	999.78	.0048505	.00	2501.6	2501.6	.0000	9.1575
1	.0006566	.0010001	192.61	999.85	.0051919	4.17	2503.4	2499.2	.0153	9.1311
2	.0007055	.0010001	179.92	999.91	.0055579	8.39	2505.2	2496.8	.0306	9.1047
3	.0007575	.0010001	168.17	999.95	.0059464	12.60	2507.1	2494.5	.0459	9.0785
4	.0008129	.0010000	157.27	999.97	.0063584	16.80	2508.9	2492.1	.0611	9.0526
5	.0008718	.0010000	147.16	999.97	.0067952	21.01	2510.7	2489.7	.0762	9.0269
6	.0009345	.0010000	137.78	999.96	.0072580	25.21	2512.6	2487.4	.0913	9.0015
7	.0010012	.0010001	129.06	999.93	.0077481	29.41	2514.4	2485.0	.1063	8.9762
8	.0010720	.0010001	120.97	999.88	.0082668	33.60	2516.2	2482.6	.1213	8.9513
9	.0011472	.0010002	113.44	999.82	.0088156	37.80	2518.1	2480.3	.1362	8.9265
10	.0012270	.0010003	106.43	999.75	.0093959	41.99	2519.9	2477.9	.1510	8.9020
11	.0013116	.0010003	99.909	999.66	.010009	46.19	2521.7	2475.5	.1658	8.8776
12	.0014014	.0010004	93.835	999.55	.010657	50.38	2523.6	2473.2	.1805	8.8536
13	.0014965	.0010006	88.176	999.44	.011341	54.57	2525.4	2470.8	.1952	8.8297
14	.0015973	.0010007	82.900	999.31	.012063	58.75	2527.2	2468.5	.2098	8.8060
15	.0017039	.0010008	77.978	999.17	.012824	62.94	2529.1	2466.1	.2243	8.7826
16	.0018168	.0010010	73.384	999.01	.013627	67.13	2530.9	2463.8	.2388	8.7593
17	.0019362	.0010012	69.095	998.85	.014473	71.31	2532.7	2461.4	.2533	8.7363
18	.0020624	.0010013	65.087	998.67	.015364	75.50	2534.5	2459.0	.2677	8.7135
19	.0021957	.0010015	61.341	998.48	.016302	79.68	2536.4	2456.7	.2820	8.6908
20	.0023366	.0010017	57.838	998.28	.017290	83.86	2538.2	2454.3	.2963	8.6684
21	.0024853	.0010019	54.561	998.07	.018328	88.04	2540.0	2452.0	.3105	8.6462
22	.0026422	.0010022	51.492	997.84	.019420	92.23	2541.8	2449.6	.3247	8.6241
23	.0028076	.0010024	48.619	997.61	.020568	96.41	2543.6	2447.2	.3389	8.6023
24	.0029821	.0010026	45.926	997.37	.021774	100.59	2545.5	2444.9	.3530	8.5806
25	.0031660	.0010029	43.402	997.12	.023041	104.77	2547.3	2442.5	.3670	8.5592
26	.0033597	.0010032	41.034	996.85	.024370	108.95	2549.1	2440.2	.3810	8.5379
27	.0035636	.0010034	38.813	996.58	.025765	113.13	2550.9	2437.8	.3949	8.5168
28	.0037782	.0010037	36.728	996.30	.027227	117.31	2552.7	2435.4	.4088	8.4959
29	.0040040	.0010040	34.769	996.01	.028761	121.48	2554.5	2433.1	.4227	8.4751
30	.0042415	.0010043	32.929	995.71	.030368	125.66	2556.4	2430.7	.4365	8.4546
31	.0044911	.0010046	31.199	995.40	.032052	129.84	2558.2	2428.3	.4503	8.4342
32	.0047534	.0010049	29.572	995.08	.033815	134.02	2560.0	2425.9	.4640	8.4140
33	.0050288	.0010053	28.042	994.76	.035661	138.20	2561.8	2423.6	.4777	8.3939
34	.0053180	.0010056	26.601	994.42	.037592	142.38	2563.6	2421.2	.4913	8.3740
35	.0056216	.0010060	25.245	994.08	.039612	146.56	2565.4	2418.8	.5049	8.3543

TABLE 2 SATURATION PROPERTIES TEMPERATURE TABLE

t °C	p MPa	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
36	.0059400	.0010063	23.967	993.73	.041724	150.74	2567.2	2416.4	.5184	8.3348
37	.0062739	.0010067	22.763	993.37	.043931	154.92	2569.0	2414.1	.5319	8.3154
38	.0066240	.0010070	21.627	993.01	.046238	159.09	2570.8	2411.7	.5453	8.2962
39	.0069908	.0010074	20.557	992.63	.048646	163.27	2572.6	2409.3	.5588	8.2772
40	.0073750	.0010078	19.546	992.25	.051161	167.45	2574.4	2406.9	.5721	8.2583
41	.0077773	.0010082	18.592	991.86	.053786	171.63	2576.2	2404.5	.5854	8.2395
42	.0081985	.0010086	17.692	991.46	.056524	175.81	2577.9	2402.1	.5987	8.2209
43	.0086391	.0010090	16.841	991.06	.059380	179.99	2579.7	2399.7	.6120	8.2025
44	.0091001	.0010094	16.036	990.65	.062358	184.17	2581.5	2397.3	.6252	8.1842
45	.0095820	.0010099	15.276	990.23	.065461	188.35	2583.3	2394.9	.6383	8.1661
46	.010086	.0010103	14.557	989.80	.068695	192.53	2585.1	2392.5	.6514	8.1481
47	.010612	.0010107	13.877	989.37	.072063	196.71	2586.9	2390.1	.6645	8.1302
48	.011162	.0010112	13.233	988.93	.075569	200.89	2588.6	2387.7	.6776	8.1125
49	.011736	.0010117	12.623	988.48	.079219	205.07	2590.4	2385.3	.6906	8.0950
50	.012335	.0010121	12.046	988.03	.083017	209.26	2592.2	2382.9	.7035	8.0776
51	.012961	.0010126	11.499	987.57	.086968	213.44	2593.9	2380.5	.7164	8.0603
52	.013613	.0010131	10.980	987.10	.091076	217.62	2595.7	2378.1	.7293	8.0432
53	.014293	.0010136	10.488	986.63	.095347	221.80	2597.5	2375.7	.7422	8.0262
54	.015002	.0010140	10.022	986.15	.099785	225.99	2599.2	2373.2	.7550	8.0093
55	.015741	.0010145	9.5789	985.67	.10440	230.17	2601.0	2370.8	.7677	7.9926
56	.016511	.0010150	9.1587	985.17	.10919	234.35	2602.7	2368.4	.7804	7.9759
57	.017313	.0010156	8.7598	984.68	.11416	238.54	2604.5	2365.9	.7931	7.9595
58	.018147	.0010161	8.3808	984.17	.11932	242.72	2606.2	2363.5	.8058	7.9431
59	.019016	.0010166	8.0208	983.66	.12468	246.91	2608.0	2361.1	.8184	7.9269
60	.019920	.0010171	7.6785	983.14	.13023	251.09	2609.7	2358.6	.8310	7.9108
61	.020861	.0010177	7.3532	982.62	.13600	255.28	2611.4	2356.2	.8435	7.8948
62	.021838	.0010182	7.0437	982.09	.14197	259.46	2613.2	2353.7	.8560	7.8790
63	.022855	.0010188	6.7493	981.56	.14816	263.65	2614.9	2351.3	.8685	7.8633
64	.023912	.0010193	6.4690	981.02	.15458	267.84	2616.6	2348.8	.8809	7.8477
65	.025009	.0010199	6.2023	980.47	.16123	272.03	2618.4	2346.3	.8933	7.8322
66	.026150	.0010205	5.9482	979.92	.16812	276.21	2620.1	2343.9	.9057	7.8168
67	.027334	.0010211	5.7062	979.36	.17525	280.40	2621.8	2341.4	.9180	7.8015
68	.028563	.0010217	5.4756	978.80	.18263	284.59	2623.5	2338.9	.9303	7.7864
69	.029838	.0010223	5.2558	978.23	.19026	288.78	2625.2	2336.4	.9426	7.7714
70	.031162	.0010228	5.0463	977.66	.19817	292.97	2626.9	2334.0	.9548	7.7565

TABLE 2 SATURATION PROPERTIES TEMPERATURE TABLE

t °C	p MPa	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
71	.032535	.0010235	4.8464	977.08	.20634	297.16	2628.6	2331.5	.9670	7.7417
72	.033958	.0010241	4.6557	976.50	.21479	301.36	2630.3	2329.0	.9792	7.7270
73	.035434	.0010247	4.4737	975.91	.22353	305.55	2632.0	2326.5	.9913	7.7124
74	.036964	.0010253	4.3000	975.31	.23256	309.74	2633.7	2324.0	1.0034	7.6979
75	.038549	.0010259	4.1341	974.71	.24189	313.94	2635.4	2321.5	1.0154	7.6835
76	.040191	.0010266	3.9757	974.11	.25153	318.13	2637.1	2318.9	1.0275	7.6693
77	.041891	.0010272	3.8243	973.50	.26149	322.33	2638.7	2316.4	1.0395	7.6551
78	.043652	.0010279	3.6796	972.88	.27177	326.52	2640.4	2313.9	1.0514	7.6410
79	.045474	.0010285	3.5413	972.26	.28238	330.72	2642.1	2311.4	1.0634	7.6271
80	.047360	.0010292	3.4091	971.64	.29333	334.92	2643.8	2308.8	1.0753	7.6132
81	.049311	.0010299	3.2826	971.00	.30464	339.11	2645.4	2306.3	1.0871	7.5995
82	.051329	.0010305	3.1616	970.37	.31630	343.31	2647.1	2303.8	1.0990	7.5858
83	.053416	.0010312	3.0458	969.73	.32832	347.51	2648.7	2301.2	1.1108	7.5722
84	.055573	.0010319	2.9350	969.08	.34072	351.71	2650.4	2298.6	1.1225	7.5588
85	.057803	.0010326	2.8288	968.43	.35350	355.92	2652.0	2296.1	1.1343	7.5454
86	.060108	.0010333	2.7272	967.78	.36668	360.12	2653.6	2293.5	1.1460	7.5321
87	.062489	.0010340	2.6298	967.12	.38026	364.32	2655.3	2290.9	1.1577	7.5189
88	.064948	.0010347	2.5365	966.45	.39425	368.53	2656.9	2288.4	1.1693	7.5058
89	.067487	.0010354	2.4470	965.79	.40866	372.73	2658.5	2285.8	1.1809	7.4928
90	.070109	.0010361	2.3613	965.11	.42350	376.94	2660.1	2283.2	1.1925	7.4799
91	.072815	.0010369	2.2791	964.43	.43877	381.15	2661.7	2280.6	1.2041	7.4670
92	.075608	.0010376	2.2002	963.75	.45450	385.36	2663.4	2278.0	1.2156	7.4543
93	.078489	.0010384	2.1245	963.06	.47069	389.57	2665.0	2275.4	1.2271	7.4416
94	.081461	.0010391	2.0519	962.37	.48735	393.78	2666.6	2272.8	1.2386	7.4291
95	.084526	.0010399	1.9822	961.67	.50448	397.99	2668.1	2270.2	1.2501	7.4166
96	.087686	.0010406	1.9153	960.97	.52211	402.20	2669.7	2267.5	1.2615	7.4042
97	.090944	.0010414	1.8510	960.27	.54024	406.42	2671.3	2264.9	1.2729	7.3919
98	.094301	.0010421	1.7893	959.56	.55888	410.63	2672.9	2262.2	1.2842	7.3796
99	.097761	.0010429	1.7300	958.84	.57804	414.85	2674.4	2259.6	1.2956	7.3675
100	.10133	.0010437	1.6730	958.12	.59773	419.06	2676.0	2256.9	1.3069	7.3554
101	.10500	.0010445	1.6182	957.40	.61797	423.28	2677.6	2254.3	1.3182	7.3434
102	.10878	.0010453	1.5655	956.67	.63876	427.50	2679.1	2251.6	1.3294	7.3315
103	.11267	.0010461	1.5149	955.94	.66012	431.73	2680.7	2248.9	1.3406	7.3196
104	.11668	.0010469	1.4662	955.20	.68206	435.95	2682.2	2246.3	1.3518	7.3078
105	.12080	.0010477	1.4193	954.46	.70458	440.17	2683.7	2243.6	1.3630	7.2962

TABLE 2 SATURATION PROPERTIES TEMPERATURE TABLE

t °C	p MPa	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
106	.12504	.0010485	1.3742	953.72	.72771	444.40	2685.3	2240.9	1.3742	7.2845
107	.12941	.0010494	1.3307	952.97	.75146	448.63	2686.8	2238.2	1.3853	7.2730
108	.13390	.0010502	1.2889	952.21	.77583	452.85	2688.3	2235.4	1.3964	7.2615
109	.13852	.0010510	1.2487	951.45	.80083	457.08	2689.8	2232.7	1.4074	7.2501
110	.14327	.0010519	1.2099	950.69	.82649	461.32	2691.3	2230.0	1.4185	7.2388
111	.14815	.0010527	1.1726	949.92	.85281	465.55	2692.8	2227.3	1.4295	7.2275
112	.15316	.0010536	1.1366	949.15	.87981	469.78	2694.3	2224.5	1.4405	7.2164
113	.15832	.0010544	1.1019	948.38	.90749	474.02	2695.8	2221.8	1.4515	7.2052
114	.16362	.0010553	1.0685	947.60	.93588	478.26	2697.2	2219.0	1.4624	7.1942
115	.16906	.0010562	1.0363	946.81	.96498	482.50	2698.7	2216.2	1.4733	7.1832
116	.17465	.0010571	1.0052	946.03	.99481	486.74	2700.2	2213.4	1.4842	7.1723
117	.18039	.0010579	.97525	945.24	1.0254	490.98	2701.6	2210.7	1.4951	7.1614
118	.18628	.0010588	.94634	944.44	1.0567	495.23	2703.1	2207.9	1.5060	7.1507
119	.19233	.0010597	.91844	943.64	1.0888	499.47	2704.5	2205.1	1.5168	7.1399
120	.19854	.0010606	.89152	942.83	1.1217	503.72	2706.0	2202.2	1.5276	7.1293
121	.20492	.0010615	.86554	942.03	1.1553	507.97	2707.4	2199.4	1.5384	7.1187
122	.21145	.0010625	.84045	941.21	1.1898	512.22	2708.8	2196.6	1.5491	7.1082
123	.21816	.0010634	.81623	940.40	1.2251	516.47	2710.2	2193.7	1.5599	7.0977
124	.22504	.0010643	.79283	939.57	1.2613	520.73	2711.6	2190.9	1.5706	7.0873
125	.23210	.0010652	.77023	938.75	1.2983	524.99	2713.0	2188.0	1.5813	7.0769
126	.23933	.0010662	.74840	937.92	1.3362	529.25	2714.4	2185.2	1.5919	7.0666
127	.24675	.0010671	.72730	937.09	1.3749	533.51	2715.8	2182.3	1.6026	7.0564
128	.25435	.0010681	.70691	936.25	1.4146	537.77	2717.2	2179.4	1.6132	7.0462
129	.26215	.0010691	.68720	935.41	1.4552	542.04	2718.5	2176.5	1.6238	7.0361
130	.27013	.0010700	.66814	934.56	1.4967	546.31	2719.9	2173.6	1.6344	7.0261
131	.27831	.0010710	.64971	933.71	1.5392	550.58	2721.3	2170.7	1.6449	7.0161
132	.28670	.0010720	.63188	932.86	1.5826	554.85	2722.6	2167.8	1.6555	7.0061
133	.29528	.0010730	.61464	932.00	1.6270	559.12	2723.9	2164.8	1.6660	6.9962
134	.30407	.0010740	.59795	931.13	1.6724	563.40	2725.3	2161.9	1.6765	6.9864
135	.31308	.0010750	.58181	930.27	1.7188	567.68	2726.6	2158.9	1.6869	6.9766
136	.32229	.0010760	.56618	929.40	1.7662	571.96	2727.9	2155.9	1.6974	6.9669
137	.33173	.0010770	.55105	928.52	1.8147	576.24	2729.2	2153.0	1.7078	6.9572
138	.34138	.0010780	.53641	927.64	1.8642	580.53	2730.5	2150.0	1.7182	6.9475
139	.35127	.0010790	.52223	926.76	1.9149	584.81	2731.8	2147.0	1.7286	6.9380
140	.36138	.0010801	.50849	925.87	1.9666	589.10	2733.1	2144.0	1.7390	6.9284

TABLE 2 SATURATION PROPERTIES TEMPERATURE TABLE

t °C	p MPa	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
141	.37172	.0010811	.49519	924.98	2.0194	593.40	2734.3	2140.9	1.7493	6.9190
142	.38231	.0010821	.48230	924.09	2.0734	597.69	2735.6	2137.9	1.7597	6.9095
143	.39313	.0010832	.46981	923.19	2.1285	601.99	2736.9	2134.9	1.7700	6.9001
144	.40420	.0010843	.45771	922.28	2.1848	606.29	2738.1	2131.8	1.7803	6.8908
145	.41552	.0010853	.44597	921.37	2.2423	610.59	2739.3	2128.7	1.7906	6.8815
146	.42709	.0010864	.43460	920.46	2.3010	614.90	2740.6	2125.7	1.8008	6.8723
147	.43892	.0010875	.42357	919.55	2.3609	619.21	2741.8	2122.6	1.8110	6.8631
148	.45101	.0010886	.41288	918.63	2.4220	623.52	2743.0	2119.5	1.8213	6.8539
149	.46337	.0010897	.40251	917.70	2.4844	627.83	2744.2	2116.3	1.8315	6.8448
150	.47600	.0010908	.39245	916.77	2.5481	632.15	2745.4	2113.2	1.8416	6.8358
151	.48890	.0010919	.38269	915.84	2.6131	636.47	2746.5	2110.1	1.8518	6.8268
152	.50208	.0010930	.37322	914.90	2.6794	640.79	2747.7	2106.9	1.8619	6.8178
153	.51554	.0010941	.36402	913.96	2.7471	645.12	2748.9	2103.8	1.8721	6.8089
154	.52929	.0010953	.35510	913.01	2.8161	649.44	2750.0	2100.6	1.8822	6.8000
155	.54333	.0010964	.34644	912.06	2.8865	653.77	2751.2	2097.4	1.8923	6.7911
156	.55767	.0010976	.33803	911.11	2.9583	658.11	2752.3	2094.2	1.9023	6.7823
157	.57230	.0010987	.32987	910.15	3.0315	662.45	2753.4	2091.0	1.9124	6.7735
158	.58725	.0010999	.32194	909.19	3.1062	666.79	2754.5	2087.7	1.9224	6.7648
159	.60250	.0011011	.31424	908.22	3.1823	671.13	2755.6	2084.5	1.9325	6.7561
160	.61806	.0011022	.30676	907.25	3.2599	675.47	2756.7	2081.3	1.9425	6.7475
161	.63395	.0011034	.29949	906.28	3.3390	679.82	2757.8	2078.0	1.9525	6.7389
162	.65016	.0011046	.29242	905.30	3.4197	684.18	2758.9	2074.7	1.9624	6.7303
163	.66669	.0011058	.28556	904.31	3.5019	688.53	2759.9	2071.4	1.9724	6.7218
164	.68356	.0011070	.27889	903.32	3.5857	692.89	2761.0	2068.1	1.9823	6.7133
165	.70077	.0011082	.27240	902.33	3.6711	697.25	2762.0	2064.8	1.9923	6.7048
166	.71831	.0011095	.26609	901.33	3.7581	701.62	2763.1	2061.4	2.0022	6.6964
167	.73621	.0011107	.25996	900.33	3.8467	705.99	2764.1	2058.1	2.0121	6.6880
168	.75445	.0011119	.25400	899.32	3.9371	710.36	2765.1	2054.7	2.0219	6.6796
169	.77306	.0011132	.24820	898.31	4.0291	714.74	2766.1	2051.3	2.0318	6.6713
170	.79202	.0011145	.24255	897.30	4.1228	719.12	2767.1	2047.9	2.0416	6.6630
171	.81135	.0011157	.23706	896.28	4.2183	723.50	2768.0	2044.5	2.0515	6.6548
172	.83106	.0011170	.23172	895.26	4.3155	727.89	2769.0	2041.1	2.0613	6.6465
173	.85114	.0011183	.22652	894.23	4.4145	732.28	2769.9	2037.7	2.0711	6.6384
174	.87160	.0011196	.22147	893.19	4.5154	736.67	2770.9	2034.2	2.0809	6.6302
175	.89244	.0011209	.21654	892.16	4.6180	741.07	2771.8	2030.7	2.0906	6.6221

TABLE 2 SATURATION PROPERTIES TEMPERATURE TABLE

t °C	p MPa	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
176	.91368	.0011222	.21175	891.11	4.7226	745.47	2772.7	2027.3	2.1004	6.6140
177	.93532	.0011235	.20708	890.07	4.8290	749.88	2773.6	2023.8	2.1101	6.6059
178	.95736	.0011248	.20254	889.02	4.9374	754.29	2774.5	2020.2	2.1199	6.5979
179	97980	.0011262	.19811	887.96	5.0477	758.70	2775.4	2016.7	2.1296	6.5899
180	1.0027	.0011275	.19380	886.90	5.1599	763.12	2776.3	2013.2	2.1393	6.5819
181	1.0259	.0011289	.18960	885.84	5.2742	767.54	2777.1	2009.6	2.1490	6.5739
182	1.0496	.0011302	.18551	884.77	5.3905	771.96	2778.0	2006.0	2.1587	6.5660
183	1.0738	.0011316	.18153	883.69	5.5089	776.39	2778.8	2002.4	2.1683	6.5581
184	1.0983	.0011330	.17764	882.61	5.6293	780.83	2779.6	1998.8	2.1780	6.5503
185	1.1233	.0011344	.17386	881.53	5.7519	785.26	2780.4	1995.2	2.1876	6.5424
186	1.1488	.0011358	.17017	880.44	5.8765	789.71	2781.2	1991.5	2.1972	6.5346
187	1.1747	.0011372	.16657	879.35	6.0034	794.15	2782.0	1987.8	2.2068	6.5268
188	1.2010	.0011386	.16307	878.25	6.1325	798.60	2782.8	1984.2	2.2164	6.5191
189	1.2278	.0011401	.15965	877.14	6.2638	803.06	2783.5	1980.5	2.2260	6.5113
190	1.2551	.0011415	.15632	876.04	6.3973	807.52	2784.3	1976.7	2.2356	6.5036
191	1.2829	.0011430	.15307	874.92	6.5332	811.98	2785.0	1973.0	2.2451	6.4959
192	1.3111	.0011444	.14990	873.81	6.6713	816.45	2785.7	1969.3	2.2547	6.4883
193	1.3398	.0011459	.14680	872.68	6.8118	820.92	2786.4	1965.5	2.2642	6.4806
194	1.3690	.0011474	.14379	871.55	6.9547	825.40	2787.1	1961.7	2.2738	6.4730
195	1.3987	.0011489	.14084	870.42	7.1001	829.88	2787.8	1957.9	2.2833	6.4654
196	1.4289	.0011504	.13797	869.28	7.2478	834.37	2788.4	1954.1	2.2928	6.4578
197	1.4596	.0011519	.13517	868.14	7.3981	838.86	2789.1	1950.2	2.3023	6.4503
198	1.4909	.0011534	.13244	866.99	7.5509	843.36	2789.7	1946.4	2.3117	6.4428
199	1.5226	.0011549	.12977	865.84	7.7062	847.86	2790.3	1942.5	2.3212	6.4353
200	1.5549	.0011565	.12716	864.68	7.8641	852.37	2790.9	1938.6	2.3307	6.4278
201	1.5877	.0011581	.12462	863.52	8.0246	856.88	2791.5	1934.6	2.3401	6.4203
202	1.6210	.0011596	.12213	862.35	8.1878	861.40	2792.1	1930.7	2.3495	6.4128
203	1.6549	.0011612	.11971	861.17	8.3537	865.92	2792.7	1926.7	2.3590	6.4054
204	1.6893	.0011628	.11734	859.99	8.5223	870.45	2793.2	1922.8	2.3684	6.3980
205	1.7243	.0011644	.11503	858.81	8.6937	874.99	2793.8	1918.8	2.3778	6.3906
206	1.7598	.0011660	.11277	857.62	8.8679	879.52	2794.3	1914.7	2.3872	6.3832
207	1.7959	.0011676	.11056	856.42	9.0449	884.07	2794.8	1910.7	2.3966	6.3759
208	1.8326	.0011693	.10840	855.22	9.2248	888.62	2795.3	1906.6	2.4059	6.3686
209	1.8699	.0011709	.10630	854.02	9.4076	893.17	2795.7	1902.6	2.4153	6.3612
210	1.9077	.0011726	.10424	852.80	9.5934	897.73	2796.2	1898.5	2.4247	6.3539

TABLE 2 SATURATION PROPERTIES TEMPERATURE TABLE

t °C	p MPa	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
211	1.9462	.0011743	.10223	851.58	9.7821	902.30	2796.6	1894.3	2.4340	6.3466
212	1.9852	.0011760	.10026	850.36	9.9739	906.87	2797.1	1890.2	2.4434	6.3394
213	2.0249	.0011777	.098340	849.13	10.169	911.45	2797.5	1886.0	2.4527	6.3321
214	2.0651	.0011794	.096461	847.90	10.367	916.04	2797.9	1881.8	2.4620	6.3249
215	2.1060	.0011811	.094625	846.66	10.568	920.63	2798.3	1877.6	2.4713	6.3176
216	2.1475	.0011829	.092830	845.41	10.772	925.22	2798.6	1873.4	2.4806	6.3104
217	2.1896	.0011846	.091075	844.16	10.980	929.83	2799.0	1869.1	2.4899	6.3032
218	2.2324	.0011864	.089358	842.90	11.191	934.44	2799.3	1864.9	2.4992	6.2961
219	2.2758	.0011882	.087680	841.64	11.405	939.05	2799.6	1860.6	2.5085	6.2889
220	2.3198	.0011900	.086038	840.36	11.623	943.67	2799.9	1856.2	2.5178	6.2817
221	2.3645	.0011918	.084432	839.09	11.844	948.30	2800.2	1851.9	2.5271	6.2746
222	2.4099	.0011936	.082861	837.81	12.068	952.94	2800.5	1847.5	2.5363	6.2674
223	2.4560	.0011954	.081324	836.52	12.296	957.58	2800.7	1843.1	2.5456	6.2603
224	2.5027	.0011973	.079820	835.22	12.528	962.23	2800.9	1838.7	2.5548	6.2532
225	2.5501	.0011992	.078349	833.92	12.763	966.88	2801.2	1834.3	2.5641	6.2461
226	2.5982	.0012010	.076909	832.61	13.002	971.55	2801.4	1829.8	2.5733	6.2390
227	2.6470	.0012029	.075500	831.30	13.245	976.21	2801.5	1825.3	2.5825	6.2319
228	2.6965	.0012048	.074121	829.98	13.491	980.89	2801.7	1820.8	2.5917	6.2249
229	2.7467	.0012068	.072771	828.65	13.742	985.57	2801.8	1816.3	2.6010	6.2178
230	2.7976	.0012087	.071450	827.32	13.996	990.27	2802.0	1811.7	2.6102	6.2107
231	2.8493	.0012107	.070156	825.98	14.254	994.96	2802.1	1807.1	2.6194	6.2037
232	2.9016	.0012127	.068890	824.63	14.516	999.67	2802.2	1802.5	2.6286	6.1967
233	2.9547	.0012147	.067649	823.28	14.782	1004.38	2802.2	1797.9	2.6378	6.1896
234	3.0086	.0012167	.066435	821.92	15.052	1009.11	2802.3	1793.2	2.6470	6.1826
235	3.0632	.0012187	.065245	820.55	15.327	1013.83	2802.3	1788.5	2.6561	6.1756
236	3.1186	.0012207	.064081	819.18	15.605	1018.57	2802.3	1783.8	2.6653	6.1686
237	3.1747	.0012228	.062940	817.80	15.888	1023.32	2802.3	1779.0	2.6745	6.1616
238	3.2317	.0012249	.061822	816.41	16.175	1028.07	2802.3	1774.2	2.6837	6.1546
239	3.2893	.0012270	.060727	815.02	16.467	1032.83	2802.3	1769.4	2.6928	6.1476
240	3.3478	.0012291	.059654	813.61	16.763	1037.60	2802.2	1764.6	2.7020	6.1406
241	3.4071	.0012312	.058603	812.20	17.064	1042.38	2802.1	1759.7	2.7112	6.1336
242	3.4672	.0012334	.057574	810.79	17.369	1047.17	2802.0	1754.9	2.7203	6.1266
243	3.5281	.0012355	.056564	809.36	17.679	1051.96	2801.9	1749.9	2.7295	6.1196
244	3.5898	.0012377	.055575	807.93	17.994	1056.77	2801.8	1745.0	2.7386	6.1127
245	3.6523	.0012399	.054606	806.49	18.313	1061.58	2801.6	1740.0	2.7478	6.1057

TABLE 2 SATURATION PROPERTIES TEMPERATURE TABLE

t °C	p MPa	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
246	3.7157	.0012422	.053655	805.04	18.637	1066.40	2801.4	1735.0	2.7569	6.0987
247	3.7799	.0012444	.052724	803.59	18.967	1071.23	2801.2	1730.0	2.7661	6.0917
248	3.8449	.0012467	.051811	802.13	19.301	1076.07	2801.0	1724.9	2.7752	6.0848
249	3.9108	.0012490	.050915	800.65	19.640	1080.92	2800.7	1719.8	2.7843	6.0778
250	3.9776	.0012513	.050037	799.18	19.985	1085.78	2800.4	1714.7	2.7935	6.0708
251	4.0452	.0012536	.049177	797.69	20.335	1090.65	2800.1	1709.5	2.8026	6.0639
252	4.1137	.0012560	.048332	796.19	20.690	1095.53	2799.8	1704.3	2.8118	6.0569
253	4.1831	.0012584	.047504	794.69	21.051	1100.42	2799.5	1699.1	2.8209	6.0499
254	4.2534	.0012608	.046692	793.18	21.417	1105.32	2799.1	1693.8	2.8300	6.0429
255	4.3246	.0012632	.045896	791.66	21.788	1110.23	2798.7	1688.5	2.8392	6.0359
256	4.3967	.0012656	.045114	790.13	22.166	1115.15	2798.3	1683.2	2.8483	6.0290
257	4.4697	.0012681	.044348	788.59	22.549	1120.08	2797.9	1677.8	2.8574	6.0220
258	4.5437	.0012706	.043596	787.04	22.938	1125.03	2797.4	1672.4	2.8666	6.0150
259	4.6185	.0012731	.042858	785.49	23.333	1129.98	2796.9	1666.9	2.8757	6.0080
260	4.6943	.0012756	.042134	783.92	23.734	1134.94	2796.4	1661.5	2.8848	6.0010
261	4.7711	.0012782	.041423	782.35	24.141	1139.92	2795.9	1656.0	2.8940	5.9940
262	4.8488	.0012808	.040726	780.77	24.554	1144.90	2795.3	1650.4	2.9031	5.9869
263	4.9275	.0012834	.040041	779.17	24.974	1149.90	2794.7	1644.8	2.9123	5.9799
264	5.0071	.0012861	.039369	777.57	25.400	1154.91	2794.1	1639.2	2.9214	5.9729
265	5.0877	.0012887	.038710	775.96	25.833	1159.93	2793.5	1633.5	2.9306	5.9658
266	5.1693	.0012914	.038062	774.34	26.273	1164.97	2792.8	1627.8	2.9397	5.9588
267	5.2519	.0012942	.037427	772.71	26.719	1170.02	2792.1	1622.1	2.9489	5.9517
268	5.3355	.0012969	.036803	771.07	27.172	1175.07	2791.4	1616.3	2.9580	5.9446
269	5.4202	.0012997	.036190	769.41	27.632	1180.15	2790.6	1610.5	2.9672	5.9375
270	5.5058	.0013025	.035588	767.75	28.099	1185.23	2789.9	1604.6	2.9763	5.9304
271	5.5925	.0013053	.034997	766.08	28.574	1190.33	2789.1	1598.7	2.9855	5.9233
272	5.6802	.0013082	.034416	764.40	29.056	1195.44	2788.2	1592.8	2.9947	5.9162
273	5.7689	.0013111	.033846	762.70	29.545	1200.56	2787.4	1586.8	3.0039	5.9091
274	5.8587	.0013141	.033286	761.00	30.042	1205.70	2786.5	1580.8	3.0131	5.9019
275	5.9496	.0013170	.032736	759.28	30.547	1210.86	2785.5	1574.7	3.0222	5.8947
276	6.0415	.0013200	.032196	757.55	31.060	1216.02	2784.6	1568.5	3.0314	5.8876
277	6.1346	.0013231	.031664	755.82	31.581	1221.20	2783.6	1562.4	3.0406	5.8804
278	6.2287	.0013261	.031143	754.07	32.110	1226.40	2782.6	1556.2	3.0499	5.8731
279	6.3239	.0013292	.030630	752.30	32.648	1231.61	2781.5	1549.9	3.0591	5.8659
280	6.4202	.0013324	.030126	750.53	33.194	1236.84	2780.4	1543.6	3.0683	5.8586

TABLE 2 SATURATION PROPERTIES TEMPERATURE TABLE

t °C	p MPa	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
281	6.5176	.0013356	.029631	748.74	33.749	1242.08	2779.3	1537.2	3.0775	5.8513
282	6.6162	.0013388	.029144	746.95	34.312	1247.34	2778.1	1530.8	3.0868	5.8440
283	6.7158	.0013420	.028666	745.14	34.885	1252.61	2777.0	1524.3	3.0960	5.8367
284	6.8167	.0013453	.028195	743.31	35.467	1257.90	2775.7	1517.8	3.1053	5.8294
285	6.9186	.0013487	.027733	741.48	36.058	1263.21	2774.5	1511.3	3.1146	5.8220
286	7.0218	.0013520	.027279	739.63	36.659	1268.54	2773.2	1504.6	3.1238	5.8146
287	7.1261	.0013554	.026832	737.76	37.269	1273.88	2771.8	1498.0	3.1331	5.8072
288	7.2315	.0013589	.026392	735.89	37.890	1279.24	2770.5	1491.2	3.1424	5.7997
289	7.3382	.0013624	.025960	734.00	38.521	1284.61	2769.1	1484.5	3.1518	5.7923
290	7.4461	.0013659	.025535	732.09	39.162	1290.01	2767.6	1477.6	3.1611	5.7848
291	7.5551	.0013695	.025117	730.17	39.813	1295.42	2766.2	1470.7	3.1704	5.7773
292	7.6654	.0013732	.024706	728.24	40.476	1300.86	2764.6	1463.8	3.1798	5.7697
293	7.7769	.0013769	.024302	726.29	41.149	1306.31	2763.1	1456.8	3.1891	5.7621
294	7.8897	.0013806	.023904	724.33	41.834	1311.78	2761.5	1449.7	3.1985	5.7545
295	8.0037	.0013844	.023513	722.35	42.530	1317.27	2759.8	1442.6	3.2079	5.7469
296	8.1189	.0013882	.023128	720.36	43.238	1322.79	2758.2	1435.4	3.2173	5.7392
297	8.2355	.0013921	.022749	718.35	43.958	1328.32	2756.4	1428.1	3.2268	5.7315
298	8.3532	.0013960	.022376	716.32	44.690	1333.88	2754.7	1420.8	3.2362	5.7237
299	8.4723	.0014000	.022010	714.28	45.435	1339.45	2752.9	1413.4	3.2457	5.7159
300	8.5927	.0014041	.021649	712.22	46.192	1345.05	2751.0	1406.0	3.2552	5.7081
301	8.7144	.0014082	.021293	710.14	46.963	1350.68	2749.1	1398.5	3.2647	5.7003
302	8.8374	.0014123	.020944	708.05	47.747	1356.32	2747.2	1390.9	3.2742	5.6924
303	8.9617	.0014166	.020600	705.94	48.545	1361.99	2745.2	1383.2	3.2837	5.6844
304	9.0873	.0014208	.020261	703.81	49.356	1367.69	2743.2	1375.5	3.2933	5.6765
305	9.2144	.0014252	.019927	701.66	50.183	1373.40	2741.1	1367.7	3.3029	5.6685
306	9.3427	.0014296	.019599	699.49	51.024	1379.15	2739.0	1359.8	3.3125	5.6604
307	9.4725	.0014341	.019275	697.30	51.880	1384.92	2736.8	1351.9	3.3221	5.6523
308	9.6036	.0014387	.018957	695.09	52.752	1390.72	2734.6	1343.9	3.3318	5.6442
309	9.7361	.0014433	.018643	692.87	53.640	1396.54	2732.3	1335.8	3.3415	5.6360
310	9.8700	.0014480	.018334	690.62	54.544	1402.39	2730.0	1327.6	3.3512	5.6278
311	10.005	.0014527	.018029	688.35	55.465	1408.27	2727.6	1319.4	3.3609	5.6195
312	10.142	.0014576	.017730	686.06	56.403	1414.18	2725.2	1311.0	3.3707	5.6111
313	10.280	.0014625	.017434	683.75	57.359	1420.12	2722.7	1302.6	3.3805	5.6028
314	10.420	.0014675	.017143	681.41	58.334	1426.09	2720.2	1294.1	3.3903	5.5943
315	10.561	.0014726	.016856	679.05	59.327	1432.09	2717.6	1285.5	3.4002	5.5858

TABLE 2 SATURATION PROPERTIES TEMPERATURE TABLE

t °C	p MPa	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
316	10.704	.0014778	.016573	676.67	60.340	1438.13	2714.9	1276.8	3.4101	5.5772
317	10.848	.0014831	.016294	674.26	61.374	1444.19	2712.2	1268.0	3.4200	5.5686
318	10.993	.0014885	.016019	671.83	62.427	1450.30	2709.4	1259.1	3.4300	5.5599
319	11.140	.0014939	.015747	669.37	63.503	1456.43	2706.6	1250.2	3.4400	5.5512
320	11.289	.0014995	.015480	666.89	64.600	1462.60	2703.7	1241.1	3.4500	5.5423
321	11.439	.0015052	.015216	664.38	65.721	1468.81	2700.7	1231.9	3.4601	5.5334
322	11.591	.0015109	.014956	661.84	66.865	1475.06	2697.6	1222.6	3.4702	5.5244
323	11.744	.0015168	.014699	659.27	68.034	1481.34	2694.5	1213.2	3.4804	5.5154
324	11.899	.0015228	.014445	656.67	69.228	1487.67	2691.3	1203.6	3.4906	5.5062
325	12.056	.0015289	.014195	654.04	70.449	1494.03	2688.0	1194.0	3.5008	5.4969
326	12.214	.0015352	.013948	651.39	71.697	1500.44	2684.6	1184.2	3.5111	5.4876
327	12.373	.0015416	.013704	648.70	72.974	1506.89	2681.1	1174.2	3.5215	5.4781
328	12.535	.0015481	.013463	645.97	74.280	1513.39	2677.6	1164.2	3.5319	5.4685
329	12.698	.0015547	.013225	643.21	75.617	1519.93	2673.9	1154.0	3.5423	5.4588
330	12.863	.0015615	.012989	640.42	76.986	1526.52	2670.2	1143.6	3.5528	5.4490
331	13.029	.0015684	.012757	637.59	78.388	1533.16	2666.3	1133.1	3.5634	5.4391
332	13.197	.0015755	.012527	634.72	79.826	1539.85	2662.3	1122.5	3.5740	5.4290
333	13.367	.0015827	.012300	631.82	81.299	1546.60	2658.3	1111.7	3.5847	5.4188
334	13.538	.0015902	.012076	628.87	82.810	1553.40	2654.1	1100.7	3.5955	5.4084
335	13.712	.0015978	.011854	625.88	84.360	1560.25	2649.7	1089.5	3.6063	5.3979
336	13.887	.0016055	.011635	622.85	85.951	1567.17	2645.3	1078.1	3.6172	5.3872
337	14.064	.0016135	.011418	619.77	87.585	1574.15	2640.7	1066.6	3.6282	5.3764
338	14.242	.0016217	.011203	616.64	89.263	1581.19	2636.0	1054.8	3.6392	5.3653
339	14.423	.0016301	.010991	613.46	90.988	1588.29	2631.2	1042.9	3.6504	5.3541
340	14.605	.0016387	.010780	610.23	92.761	1595.47	2626.2	1030.7	3.6616	5.3427
341	14.789	.0016476	.010573	606.95	94.584	1602.72	2621.0	1018.3	3.6729	5.3312
342	14.976	.0016567	.010367	603.61	96.460	1610.05	2615.7	1005.7	3.6844	5.3194
343	15.164	.0016661	.010164	600.21	98.391	1617.45	2610.3	992.8	3.6959	5.3074
344	15.354	.0016758	.0099622	596.74	100.38	1624.94	2604.7	979.7	3.7075	5.2952
345	15.545	.0016858	.0097631	593.21	102.43	1632.52	2598.9	966.4	3.7193	5.2828
346	15.739	.0016961	.0095660	589.60	104.54	1640.19	2593.0	952.8	3.7311	5.2702
347	15.935	.0017067	.0093711	585.92	106.71	1647.96	2586.9	938.9	3.7431	5.2574
348	16.133	.0017178	.0091783	582.15	108.95	1655.84	2580.7	924.8	3.7553	5.2444
349	16.333	.0017292	.0089876	578.29	111.26	1663.83	2574.2	910.4	3.7676	5.2311
350	16.535	.0017411	.0087991	574.34	113.65	1671.94	2567.7	895.7	3.7800	5.2177

TABLE 2 SATURATION PROPERTIES TEMPERATURE TABLE

t °C	p MPa	v' m³/kg	v'' m³/kg	ρ' kg/m³	ρ'' kg/m³	h' kJ/kg	h'' kJ/kg	r kJ/kg	s' kJ/kg K	s'' kJ/kg K
351	16.739	.0017532	.0086094	570.38	116.15	1680.38	2560.7	880.4	3.7933	5.2036
352	16.945	.0017661	.0084205	566.23	118.76	1689.32	2553.5	864.2	3.8071	5.1893
353	17.154	.0017796	.0082324	561.94	121.47	1698.36	2546.1	847.7	3.8209	5.1746
354	17.364	.0017937	.0080453	557.51	124.30	1707.47	2538.4	830.9	3.8349	5.1596
355	17.577	.0018085	.0078592	552.94	127.24	1716.63	2530.4	813.8	3.8489	5.1442
356	17.792	.0018241	.0076740	548.21	130.31	1725.88	2522.1	796.2	3.8629	5.1283
357	18.009	.0018406	.0074897	543.30	133.52	1735.22	2513.5	778.3	3.8772	5.1121
358	18.229	.0018580	.0073061	538.22	136.87	1744.70	2504.6	759.9	3.8915	5.0953
359	18.451	.0018764	.0071229	532.94	140.39	1754.34	2495.2	740.9	3.9061	5.0780
360	18.675	.0018959	.0069398	527.45	144.10	1764.17	2485.4	721.3	3.9210	5.0600
361	18.902	.0019167	.0067566	521.74	148.00	1774.23	2475.2	701.0	3.9362	5.0414
362	19.131	.0019388	.0065727	515.78	152.14	1784.58	2464.4	679.8	3.9518	5.0220
363	19.362	.0019626	.0063877	509.53	156.55	1795.26	2453.0	657.8	3.9679	5.0017
364	19.596	.0019882	.0062010	502.97	161.27	1806.36	2440.9	634.6	3.9846	4.9804
365	19.833	.0020160	.0060116	496.03	166.35	1817.96	2428.0	610.0	4.0021	4.9579
366	20.072	.0020464	.0058186	488.66	171.86	1830.20	2414.1	583.9	4.0205	4.9339
367	20.313	.0020802	.0056206	480.73	177.92	1843.24	2399.0	555.7	4.0401	4.9081
368	20.557	.0021181	.0054158	472.12	184.65	1857.33	2382.4	525.1	4.0613	4.8801
369	20.804	.0021618	.0052012	462.59	192.26	1872.79	2363.9	491.1	4.0845	4.8492
370	21.054	.0022136	.0049728	451.76	201.10	1890.21	2342.8	452.6	4.1108	4.8144
371	21.306	.0022778	.0047233	439.03	211.71	1910.50	2317.9	407.4	4.1414	4.7738
372	21.562	.0023636	.0044389	423.09	225.28	1935.57	2287.0	351.4	4.1794	4.7240
373	21.820	.0024963	.0040840	400.59	244.86	1970.50	2244.0	273.5	4.2326	4.6559
374	22.081	.0028427	.0034659	351.78	288.52	2046.72	2156.2	109.5	4.3493	4.5185
374.15	22.120	.0031700	.0031700	315.46	315.46	2107.37	2107.4	.0	4.4429	4.4429

TABLE 3 WATER AND STEAM

p(MPa)	.001			.002			.003			.004		
SAT t(°C)	6.98			17.51			24.10			28.98		
SAT.LIQ	29.3	.1060	.0010001	73.5	.2607	.0010012	101.0	.3544	.0010027	121.4	.4225	.0010040
SAT.VAP	2514.4	8.9767	129.20904	2533.6	8.7246	67.00616	2545.6	8.5785	45.66730	2554.5	8.4755	34.80222
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	-.0	-.0002	.0010002	-.0	-.0002	.0010002	-.0	-.0002	.0010002	-.0	-.0002	.0010002
10	2520.0	8.9966	130.60	42.0	.1510	.0010003	42.0	.1510	.0010003	42.0	.1510	.0010003
20	2538.6	9.0611	135.23	2538.3	8.7404	67.582	83.9	.2963	.0010017	83.9	.2963	.0010017
30	2557.2	9.1236	139.85	2556.9	8.8031	69.897	2556.7	8.6152	46.579	2556.4	8.4818	34.920
40	2575.9	9.1842	144.47	2575.6	8.8637	72.211	2575.4	8.6760	48.124	2575.2	8.5426	36.081
50	2594.6	9.2430	149.09	2594.4	8.9226	74.524	2594.2	8.7349	49.668	2593.9	8.6016	37.240
60	2613.3	9.3001	153.71	2613.1	8.9797	76.837	2612.9	8.7922	51.211	2612.7	8.6589	38.398
70	2632.1	9.3556	158.33	2631.9	9.0353	79.148	2631.7	8.8478	52.754	2631.6	8.7146	39.556
80	2650.9	9.4096	162.95	2650.7	9.0894	81.459	2650.6	8.9019	54.296	2650.4	8.7688	40.714
90	2669.7	9.4622	167.57	2669.6	9.1421	83.770	2669.5	8.9546	55.837	2669.3	8.8216	41.871
100	2688.6	9.5136	172.19	2688.5	9.1934	86.080	2688.4	9.0060	57.378	2688.3	8.8730	43.027
110	2707.6	9.5636	176.80	2707.4	9.2435	88.390	2707.3	9.0562	58.919	2707.2	8.9232	44.184
120	2726.5	9.6125	181.42	2726.4	9.2924	90.700	2726.3	9.1051	60.460	2726.2	8.9721	45.339
130	2745.6	9.6603	186.04	2745.5	9.3402	93.009	2745.4	9.1529	62.000	2745.3	9.0200	46.495
140	2764.6	9.7070	190.66	2764.5	9.3870	95.319	2764.5	9.1997	63.540	2764.4	9.0668	47.650
150	2783.7	9.7527	195.27	2783.7	9.4327	97.628	2783.6	9.2454	65.080	2783.5	9.1125	48.806
160	2802.9	9.7975	199.89	2802.8	9.4775	99.936	2802.8	9.2902	66.619	2802.7	9.1573	49.961
170	2822.1	9.8413	204.50	2822.1	9.5213	102.25	2822.0	9.3341	68.159	2821.9	9.2012	51.116
180	2841.4	9.8843	209.12	2841.3	9.5643	104.55	2841.3	9.3771	69.698	2841.2	9.2443	52.270
190	2860.7	9.9265	213.74	2860.6	9.6065	106.86	2860.6	9.4193	71.237	2860.5	9.2865	53.425
200	2880.1	9.9679	218.35	2880.0	9.6479	109.17	2880.0	9.4607	72.777	2879.9	9.3279	54.580
210	2899.5	10.0085	222.97	2899.4	9.6885	111.48	2899.4	9.5013	74.316	2899.4	9.3685	55.734
220	2919.0	10.0484	227.58	2918.9	9.7284	113.79	2918.9	9.5412	75.855	2918.8	9.4084	56.889
230	2938.5	10.0876	232.20	2938.5	9.7677	116.10	2938.4	9.5805	77.394	2938.4	9.4476	58.043
240	2958.1	10.1262	236.82	2958.0	9.8062	118.40	2958.0	9.6190	78.933	2958.0	9.4862	59.197
250	2977.7	10.1641	241.43	2977.7	9.8441	120.71	2977.7	9.6570	80.471	2977.6	9.5241	60.351
260	2997.4	10.2014	246.05	2997.4	9.8814	123.02	2997.4	9.6943	82.010	2997.3	9.5615	61.506
270	3017.2	10.2381	250.66	3017.2	9.9182	125.33	3017.1	9.7310	83.549	3017.1	9.5982	62.660
280	3037.0	10.2743	255.28	3037.0	9.9543	127.64	3037.0	9.7672	85.088	3036.9	9.6344	63.814
290	3056.9	10.3099	259.89	3056.9	9.9899	129.94	3056.8	9.8028	86.626	3056.8	9.6700	64.968
300	3076.8	10.3450	264.51	3076.8	10.0251	132.25	3076.8	9.8379	88.165	3076.8	9.7051	66.122

TABLE 3 WATER AND STEAM

	p(MPa)	.001			.002			.003			.004	
SAT	t(°C)	6.98			17.51			24.10			28.98	
SAT.LIQ	29.3	.1060	.0010001	73.5	.2607	.0010012	101.0	.3544	.0010027	121.4	.4225	.0010040
SAT.VAP	2514.4	8.9767	129.20904	2533.6	8.7246	67.00616	2545.6	8.5785	45.66730	2554.5	8.4755	34.80222
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3096.8	10.3796	269.12	3096.8	10.0597	134.56	3096.8	9.8725	89.704	3096.8	9.7397	67.276
320	3116.9	10.4137	273.74	3116.9	10.0938	136.87	3116.9	9.9066	91.242	3116.8	9.7738	68.430
330	3137.0	10.4473	278.35	3137.0	10.1274	139.17	3137.0	9.9403	92.781	3137.0	9.8075	69.584
340	3157.2	10.4805	282.97	3157.2	10.1606	141.48	3157.2	9.9735	94.320	3157.2	9.8407	70.738
350	3177.5	10.5133	287.58	3177.5	10.1934	143.79	3177.4	10.0062	95.858	3177.4	9.8735	71.892
360	3197.8	10.5457	292.20	3197.8	10.2257	146.10	3197.8	10.0386	97.397	3197.7	9.9058	73.046
370	3218.2	10.5776	296.82	3218.2	10.2577	148.41	3218.1	10.0705	98.935	3218.1	9.9378	74.200
380	3238.6	10.6091	301.43	3238.6	10.2892	150.71	3238.6	10.1021	100.47	3238.6	9.9693	75.354
390	3259.1	10.6403	306.05	3259.1	10.3204	153.02	3259.1	10.1333	102.01	3259.1	10.0005	76.508
400	3279.7	10.6711	310.66	3279.7	10.3512	155.33	3279.7	10.1641	103.55	3279.7	10.0313	77.662
410	3300.4	10.7016	315.28	3300.4	10.3817	157.64	3300.3	10.1945	105.09	3300.3	10.0617	78.816
420	3321.1	10.7317	319.89	3321.1	10.4118	159.94	3321.1	10.2246	106.63	3321.0	10.0918	79.970
430	3341.9	10.7614	324.51	3341.8	10.4415	162.25	3341.8	10.2544	108.17	3341.8	10.1216	81.124
440	3362.7	10.7909	329.12	3362.7	10.4710	164.56	3362.7	10.2838	109.71	3362.7	10.1510	82.278
450	3383.6	10.8200	333.74	3383.6	10.5001	166.87	3383.6	10.3129	111.24	3383.6	10.1802	83.432
460	3404.6	10.8488	338.35	3404.6	10.5289	169.17	3404.6	10.3418	112.78	3404.6	10.2090	84.586
470	3425.7	10.8773	342.97	3425.6	10.5574	171.48	3425.6	10.3703	114.32	3425.6	10.2375	85.740
480	3446.8	10.9056	347.58	3446.8	10.5857	173.79	3446.8	10.3985	115.86	3446.7	10.2657	86.893
490	3468.0	10.9335	352.20	3468.0	10.6136	176.10	3467.9	10.4265	117.40	3467.9	10.2937	88.047
500	3489.2	10.9612	356.81	3489.2	10.6413	178.41	3489.2	10.4541	118.94	3489.2	10.3214	89.201
510	3510.6	10.9886	361.43	3510.5	10.6687	180.71	3510.5	10.4815	120.47	3510.5	10.3488	90.355
520	3531.9	11.0157	366.04	3531.9	10.6958	183.02	3531.9	10.5087	122.01	3531.9	10.3759	91.509
530	3553.4	11.0426	370.66	3553.4	10.7227	185.33	3553.4	10.5356	123.55	3553.4	10.4028	92.663
540	3574.9	11.0693	375.27	3574.9	10.7494	187.64	3574.9	10.5622	125.09	3574.9	10.4295	93.817
550	3596.5	11.0957	379.89	3596.5	10.7758	189.94	3596.5	10.5886	126.63	3596.5	10.4559	94.971
560	3618.2	11.1218	384.50	3618.2	10.8019	192.25	3618.2	10.6148	128.17	3618.2	10.4820	96.124
570	3640.0	11.1478	389.12	3640.0	10.8279	194.56	3639.9	10.6408	129.71	3639.9	10.5080	97.278
580	3661.8	11.1735	393.74	3661.8	10.8536	196.87	3661.8	10.6665	131.24	3661.7	10.5337	98.432
590	3683.7	11.1990	398.35	3683.6	10.8791	199.17	3683.6	10.6920	132.78	3683.6	10.5592	99.586
600	3705.6	11.2243	402.97	3705.6	10.9044	201.48	3705.6	10.7173	134.32	3705.6	10.5845	100.74

TABLE 3 WATER AND STEAM

	p(MPa) .001			.002			.003			.004		
SAT t(°C)		6.98			17.51			24.10			28.98	
SAT.LIQ	29.3	.1060	.0010001	73.5	.2607	.0010012	101.0	.3544	.0010027	121.4	.4225	.0010040
SAT.VAP	2514.4	8.9767	129.20904	2533.6	8.7246	67.00616	2545.6	8.5785	45.66730	2554.5	8.4755	34.80222
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3727.6	11.2494	407.58	3727.6	10.9295	203.79	3727.6	10.7423	135.86	3727.6	10.6095	101.89
620	3749.7	11.2742	412.20	3749.7	10.9543	206.10	3749.7	10.7672	137.40	3749.7	10.6344	103.05
630	3771.9	11.2989	416.81	3771.9	10.9790	208.40	3771.8	10.7919	138.94	3771.8	10.6591	104.20
640	3794.1	11.3234	421.43	3794.1	11.0035	210.71	3794.1	10.8163	140.47	3794.1	10.6836	105.36
650	3816.4	11.3476	426.04	3816.4	11.0277	213.02	3816.4	10.8406	142.01	3816.4	10.7078	106.51
660	3838.7	11.3717	430.66	3838.7	11.0518	215.33	3838.7	10.8647	143.55	3838.7	10.7319	107.66
670	3861.2	11.3956	435.27	3861.2	11.0757	217.64	3861.2	10.8886	145.09	3861.1	10.7558	108.82
680	3883.7	11.4194	439.89	3883.7	11.0995	219.94	3883.6	10.9123	146.63	3883.6	10.7796	109.97
690	3906.2	11.4429	444.50	3906.2	11.1230	222.25	3906.2	10.9359	148.17	3906.2	10.8031	111.12
700	3928.9	11.4663	449.12	3928.8	11.1464	224.56	3928.8	10.9593	149.70	3928.8	10.8265	112.28
710	3951.6	11.4895	453.73	3951.5	11.1696	226.87	3951.5	10.9825	151.24	3951.5	10.8497	113.43
720	3974.3	11.5125	458.35	3974.3	11.1926	229.17	3974.3	11.0055	152.78	3974.3	10.8727	114.59
730	3997.1	11.5354	462.96	3997.1	11.2155	231.48	3997.1	11.0284	154.32	3997.1	10.8956	115.74
740	4020.0	11.5581	467.58	4020.0	11.2382	233.79	4020.0	11.0511	155.86	4020.0	10.9183	116.89
750	4043.0	11.5807	472.19	4043.0	11.2608	236.10	4043.0	11.0736	157.40	4043.0	10.9409	118.05
760	4066.0	11.6031	476.81	4066.0	11.2832	238.40	4066.0	11.0960	158.94	4066.0	10.9633	119.20
770	4089.1	11.6253	481.42	4089.1	11.3054	240.71	4089.1	11.1183	160.47	4089.1	10.9855	120.35
780	4112.3	11.6474	486.04	4112.2	11.3275	243.02	4112.2	11.1404	162.01	4112.2	11.0076	121.51
790	4135.5	11.6693	490.65	4135.5	11.3494	245.33	4135.5	11.1623	163.55	4135.5	11.0295	122.66
800	4158.7	11.6911	495.27	4158.7	11.3712	247.63	4158.7	11.1841	165.09	4158.7	11.0513	123.82

TABLE 3 WATER AND STEAM

p(MPa)	.005			.006			.007			= .008		
SAT t(°C)	32.90			36.18			39.02			41.53		
SAT.LIQ	137.8	.4763	.0010052	151.5	.5209	.0010064	163.4	.5591	.0010074	173.9	.5925	.0010084
SAT.VAP	2561.6	8.3960	28.19436	2567.5	8.3312	23.74104	2572.6	8.2767	20.53104	2577.1	8.2296	18.10459
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	-.0	-.0002	.0010002	-.0	-.0002	.0010002	-.0	-.0002	.0010002	-.0	-.0002	.0010002
10	42.0	.1510	.0010003	42.0	.1510	.0010003	42.0	.1510	.0010003	42.0	.1510	.0010003
20	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017
30	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043
40	2574.9	8.4390	28.854	2574.7	8.3543	24.037	2574.5	8.2826	20.596	167.5	.5721	.0010078
50	2593.7	8.4981	29.783	2593.5	8.4135	24.812	2593.3	8.3418	21.261	2593.1	8.2797	18.598
60	2612.6	8.5555	30.711	2612.4	8.4709	25.586	2612.2	8.3993	21.925	2612.0	8.3372	19.179
70	2631.4	8.6113	31.638	2631.2	8.5267	26.359	2631.1	8.4552	22.588	2630.9	8.3932	19.760
80	2650.3	8.6655	32.565	2650.1	8.5810	27.132	2650.0	8.5095	23.251	2649.8	8.4476	20.341
90	2669.2	8.7183	33.491	2669.1	8.6339	27.904	2668.9	8.5624	23.914	2668.8	8.5005	20.921
100	2688.1	8.7698	34.417	2688.0	8.6854	28.676	2687.9	8.6140	24.576	2687.8	8.5521	21.501
110	2707.1	8.8200	35.342	2707.0	8.7356	29.448	2706.9	8.6642	25.238	2706.8	8.6024	22.080
120	2726.1	8.8690	36.267	2726.0	8.7846	30.219	2725.9	8.7133	25.899	2725.8	8.6515	22.659
130	2745.2	8.9168	37.192	2745.1	8.8325	30.990	2745.0	8.7612	26.560	2744.9	8.6994	23.238
140	2764.3	8.9636	38.117	2764.2	8.8793	31.761	2764.1	8.8080	27.221	2764.1	8.7463	23.816
150	2783.4	9.0094	39.041	2783.4	8.9251	32.532	2783.3	8.8539	27.882	2783.2	8.7921	24.395
160	2802.6	9.0542	39.966	2802.6	8.9700	33.302	2802.5	8.8987	28.543	2802.4	8.8370	24.973
170	2821.9	9.0982	40.890	2821.8	9.0139	34.072	2821.8	8.9427	29.203	2821.7	8.8809	25.551
180	2841.2	9.1412	41.814	2841.1	9.0569	34.843	2841.0	8.9857	29.863	2841.0	8.9240	26.129
190	2860.5	9.1834	42.738	2860.4	9.0992	35.613	2860.4	9.0279	30.523	2860.3	8.9662	26.707
200	2879.9	9.2248	43.661	2879.8	9.1406	36.383	2879.8	9.0694	31.184	2879.7	9.0077	27.284
210	2899.3	9.2654	44.585	2899.3	9.1812	37.153	2899.2	9.1100	31.844	2899.2	9.0483	27.862
220	2918.8	9.3054	45.509	2918.8	9.2212	37.922	2918.7	9.1500	32.504	2918.7	9.0883	28.439
230	2938.3	9.3446	46.432	2938.3	9.2604	38.692	2938.3	9.1892	33.163	2938.2	9.1275	29.017
240	2957.9	9.3832	47.356	2957.9	9.2990	39.462	2957.9	9.2278	33.823	2957.8	9.1661	29.594
250	2977.6	9.4211	48.280	2977.6	9.3369	40.232	2977.5	9.2657	34.483	2977.5	9.2041	30.172
260	2997.3	9.4584	49.203	2997.3	9.3742	41.001	2997.3	9.3031	35.143	2997.2	9.2414	30.749
270	3017.1	9.4952	50.126	3017.1	9.4110	41.771	3017.0	9.3398	35.802	3017.0	9.2781	31.326
280	3036.9	9.5313	51.050	3036.9	9.4472	42.540	3036.9	9.3760	36.462	3036.8	9.3143	31.903
290	3056.8	9.5670	51.973	3056.8	9.4828	43.310	3056.7	9.4116	37.122	3056.7	9.3500	32.481
300	3076.7	9.6021	52.897	3076.7	9.5179	44.079	3076.7	9.4467	37.781	3076.7	9.3851	33.058

TABLE 3 WATER AND STEAM

p(MPa)	.005			.006			.007			.008		
SAT t(°C)	32.90			36.18			39.02			41.53		
SAT.LIQ	137.8	.4763	.0010052	151.5	.5209	.0010064	163.4	.5591	.0010074	173.9	.5925	.0010084
SAT.VAP	2561.6	8.3960	28.19436	2567.5	8.3312	23.74104	2572.6	8.2767	20.53104	2577.1	8.2296	18.10459
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3096.7	9.6367	53.820	3096.7	9.5525	44.849	3096.7	9.4813	38.441	3096.7	9.4197	33.635
320	3116.8	9.6708	54.743	3116.8	9.5866	45.618	3116.8	9.5155	39.101	3116.8	9.4538	34.212
330	3137.0	9.7045	55.666	3136.9	9.6203	46.388	3136.9	9.5491	39.760	3136.9	9.4875	34.789
340	3157.1	9.7377	56.590	3157.1	9.6535	47.157	3157.1	9.5823	40.420	3157.1	9.5207	35.367
350	3177.4	9.7704	57.513	3177.4	9.6863	47.927	3177.4	9.6151	41.079	3177.3	9.5535	35.944
360	3197.7	9.8028	58.436	3197.7	9.7186	48.696	3197.7	9.6475	41.739	3197.7	9.5858	36.521
370	3218.1	9.8347	59.359	3218.1	9.7506	49.465	3218.1	9.6794	42.398	3218.1	9.6178	37.098
380	3238.6	9.8663	60.283	3238.5	9.7821	50.235	3238.5	9.7110	43.058	3238.5	9.6493	37.675
390	3259.1	9.8975	61.206	3259.1	9.8133	51.004	3259.0	9.7422	43.717	3259.0	9.6805	38.252
400	3279.7	9.9283	62.129	3279.6	9.8441	51.773	3279.6	9.7730	44.377	3279.6	9.7113	38.829
410	3300.3	9.9587	63.052	3300.3	9.8746	52.543	3300.3	9.8034	45.036	3300.3	9.7418	39.406
420	3321.0	9.9888	63.975	3321.0	9.9047	53.312	3321.0	9.8335	45.696	3321.0	9.7719	39.983
430	3341.8	10.0186	64.898	3341.8	9.9344	54.081	3341.8	9.8633	46.355	3341.8	9.8016	40.560
440	3362.7	10.0480	65.822	3362.6	9.9639	54.851	3362.6	9.8927	47.014	3362.6	9.8311	41.137
450	3383.6	10.0772	66.745	3383.6	9.9930	55.620	3383.5	9.9219	47.674	3383.5	9.8602	41.714
460	3404.6	10.1060	67.668	3404.5	10.0218	56.389	3404.5	9.9507	48.333	3404.5	9.8890	42.291
470	3425.6	10.1345	68.591	3425.6	10.0504	57.159	3425.6	9.9792	48.993	3425.6	9.9176	42.868
480	3446.7	10.1627	69.514	3446.7	10.0786	57.928	3446.7	10.0074	49.652	3446.7	9.9458	43.445
490	3467.9	10.1907	70.437	3467.9	10.1065	58.697	3467.9	10.0354	50.312	3467.9	9.9737	44.022
500	3489.2	10.2184	71.360	3489.2	10.1342	59.467	3489.2	10.0631	50.971	3489.1	10.0014	44.599
510	3510.5	10.2458	72.284	3510.5	10.1616	60.236	3510.5	10.0905	51.630	3510.5	10.0288	45.176
520	3531.9	10.2729	73.207	3531.9	10.1888	61.005	3531.9	10.1176	52.290	3531.9	10.0560	45.753
530	3553.4	10.2998	74.130	3553.4	10.2157	61.774	3553.4	10.1445	52.949	3553.3	10.0829	46.330
540	3574.9	10.3265	75.053	3574.9	10.2423	62.544	3574.9	10.1712	53.609	3574.9	10.1095	46.907
550	3596.5	10.3529	75.976	3596.5	10.2687	63.313	3596.5	10.1976	54.268	3596.5	10.1359	47.484
560	3618.2	10.3790	76.899	3618.2	10.2949	64.082	3618.2	10.2237	54.927	3618.2	10.1621	48.061
570	3639.9	10.4050	77.822	3639.9	10.3208	64.851	3639.9	10.2497	55.587	3639.9	10.1881	48.638
580	3661.7	10.4307	78.745	3661.7	10.3466	65.621	3661.7	10.2754	56.246	3661.7	10.2138	49.215
590	3683.6	10.4562	79.668	3683.6	10.3721	66.390	3683.6	10.3009	56.905	3683.6	10.2393	49.792
600	3705.6	10.4815	80.592	3705.6	10.3973	67.159	3705.6	10.3262	57.565	3705.5	10.2646	50.369

TABLE 3 WATER AND STEAM

p(MPa)	.005			.006			.007			.008		
SAT t(°C)	32.90			36.18			39.02			41.53		
SAT.LIQ	137.8	.4763	.0010052	151.5	.5209	.0010064	163.4	.5591	.0010074	173.9	.5925	.0010084
SAT.VAP	2561.6	8.3960	28.19436	2567.5	8.3312	23.74104	2572.6	8.2767	20.53104	2577.1	8.2296	18.10459
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3727.6	10.5066	81.515	3727.6	10.4224	67.929	3727.6	10.3513	58.224	3727.6	10.2896	50.946
620	3749.7	10.5314	82.438	3749.7	10.4473	68.698	3749.7	10.3761	58.884	3749.7	10.3145	51.523
630	3771.8	10.5561	83.361	3771.8	10.4719	69.467	3771.8	10.4008	59.543	3771.8	10.3392	52.100
640	3794.1	10.5806	84.284	3794.0	10.4964	70.236	3794.0	10.4253	60.202	3794.0	10.3636	52.677
650	3816.3	10.6049	85.207	3816.3	10.5207	71.005	3816.3	10.4496	60.862	3816.3	10.3879	53.254
660	3838.7	10.6289	86.130	3838.7	10.5448	71.775	3838.7	10.4736	61.521	3838.7	10.4120	53.831
670	3861.1	10.6529	87.053	3861.1	10.5687	72.544	3861.1	10.4976	62.180	3861.1	10.4359	54.408
680	3883.6	10.6766	87.976	3883.6	10.5924	73.313	3883.6	10.5213	62.840	3883.6	10.4597	54.985
690	3906.2	10.7001	88.899	3906.2	10.6160	74.082	3906.2	10.5448	63.499	3906.2	10.4832	55.561
700	3928.8	10.7235	89.822	3928.8	10.6394	74.852	3928.8	10.5682	64.158	3928.8	10.5066	56.138
710	3951.5	10.7467	90.745	3951.5	10.6626	75.621	3951.5	10.5914	64.818	3951.5	10.5298	56.715
720	3974.3	10.7697	91.668	3974.3	10.6856	76.390	3974.3	10.6144	65.477	3974.3	10.5528	57.292
730	3997.1	10.7926	92.592	3997.1	10.7085	77.159	3997.1	10.6373	66.136	3997.1	10.5757	57.869
740	4020.0	10.8153	93.515	4020.0	10.7312	77.929	4020.0	10.6600	66.796	4020.0	10.5984	58.446
750	4043.0	10.8379	94.438	4043.0	10.7537	78.698	4043.0	10.6826	67.455	4043.0	10.6210	59.023
760	4066.0	10.8603	95.361	4066.0	10.7761	79.467	4066.0	10.7050	68.114	4066.0	10.6433	59.600
770	4089.1	10.8825	96.284	4089.1	10.7984	80.236	4089.1	10.7272	68.774	4089.1	10.6656	60.177
780	4112.2	10.9046	97.207	4112.2	10.8204	81.005	4112.2	10.7493	69.433	4112.2	10.6877	60.754
790	4135.4	10.9265	98.130	4135.4	10.8424	81.775	4135.4	10.7712	70.092	4135.4	10.7096	61.331
800	4158.7	10.9483	99.053	4158.7	10.8642	82.544	4158.7	10.7930	70.752	4158.7	10.7314	61.908

TABLE 3 WATER AND STEAM

p(MPa)	.009			.010			.012			.014		
SAT ; t(°C)	43.79			45.83			49.45			52.57		
SAT.LIQ	183.3	.6224	.0010094	191.8	.6493	.0010102	206.9	.6963	.0010119	220.0	.7367	.0010133
SAT.VAP	2581.1	8.1881	16.20427	2584.8	8.1511	14.67461	2591.2	8.0872	12.36190	2596.7	8.0334	10.69420
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	-.0	-.0002	.0010002	-.0	-.0002	.0010002	-.0	-.0002	.0010002	-.0	-.0002	.0010002
10	42.0	.1510	.0010002	42.0	.1510	.0010002	42.0	.1510	.0010002	42.0	.1510	.0010002
20	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017
30	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043
40	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078
50	2592.9	8.2248	16.526	2592.7	8.1757	14.869	2592.2	8.0905	12.384	209.3	.7035	.0010121
60	2611.8	8.2824	17.044	2611.6	8.2336	15.336	2611.2	8.1483	12.773	2610.8	8.0763	10.943
70	2630.7	8.3384	17.561	2630.6	8.2894	15.801	2630.2	8.2045	13.162	2629.9	8.1325	11.276
80	2649.7	8.3929	18.077	2649.5	8.3439	16.266	2649.2	8.2591	13.550	2648.9	8.1872	11.610
90	2668.6	8.4458	18.593	2668.5	8.3969	16.731	2668.2	8.3122	13.938	2668.0	8.2404	11.943
100	2687.6	8.4974	19.109	2687.5	8.4486	17.195	2687.3	8.3639	14.325	2687.0	8.2922	12.275
110	2706.7	8.5478	19.624	2706.6	8.4989	17.659	2706.3	8.4143	14.712	2706.1	8.3427	12.607
120	2725.7	8.5969	20.139	2725.6	8.5481	18.123	2725.4	8.4635	15.099	2725.2	8.3920	12.939
130	2744.8	8.6449	20.654	2744.7	8.5961	18.586	2744.6	8.5116	15.485	2744.4	8.4401	13.270
140	2764.0	8.6917	21.168	2763.9	8.6430	19.050	2763.7	8.5585	15.872	2763.6	8.4871	13.602
150	2783.2	8.7376	21.682	2783.1	8.6888	19.512	2782.9	8.6044	16.258	2782.8	8.5330	13.933
160	2802.4	8.7825	22.196	2802.3	8.7338	19.975	2802.2	8.6494	16.644	2802.0	8.5780	14.264
170	2821.6	8.8265	22.710	2821.6	8.7777	20.438	2821.4	8.6934	17.029	2821.3	8.6220	14.595
180	2840.9	8.8695	23.224	2840.9	8.8208	20.900	2840.8	8.7365	17.415	2840.7	8.6652	14.925
190	2860.3	8.9118	23.738	2860.2	8.8631	21.363	2860.1	8.7788	17.800	2860.0	8.7074	15.256
200	2879.7	8.9532	24.251	2879.6	8.9045	21.825	2879.5	8.8202	18.186	2879.5	8.7489	15.586
210	2899.1	8.9939	24.765	2899.1	8.9452	22.287	2899.0	8.8609	18.571	2898.9	8.78[illegible]	15.917
220	2918.6	9.0339	25.278	2918.6	8.9852	22.750	2918.5	8.9009	18.956	2918.4	8.8296	16.247
230	2938.2	9.0731	25.792	2938.2	9.0244	23.212	2938.1	8.9402	19.341	2938.0	8.8689	16.577
240	2957.8	9.1117	26.305	2957.8	9.0630	23.674	2957.7	8.9788	19.727	2957.6	8.9075	16.907
250	2977.5	9.1497	26.818	2977.4	9.1010	24.136	2977.4	9.0168	20.112	2977.3	8.9455	17.237
260	2997.2	9.1870	27.332	2997.2	9.1383	24.598	2997.1	9.0541	20.497	2997.0	8.9829	17.567
270	3017.0	9.2237	27.845	3016.9	9.1751	25.060	3016.9	9.0909	20.882	3016.8	9.0196	17.898
280	3036.8	9.2599	28.358	3036.8	9.2113	25.521	3036.7	9.1271	21.267	3036.7	9.0558	18.228
290	3056.7	9.2956	28.871	3056.7	9.2469	25.983	3056.6	9.1627	21.652	3056.6	9.0915	18.558
300	3076.6	9.3307	29.384	3076.6	9.2820	26.445	3076.6	9.1978	22.036	3076.5	9.1266	18.888

TABLE 3 WATER AND STEAM

	p(MPa)	.009			.010			.012			.014	
SAT	t(°C)	43.79			45.83			49.45			52.57	
SAT.LIQ		183.3	.6224	.0010094	191.8	.6493	.0010102	206.9	.6963	.0010119	220.0	.7367	.0010133
SAT.VAP		2581.1	8.1881	16.20427	2584.8	8.1511	14.67461	2591.2	8.0872	12.36190	2596.7	8.0334	10.69420
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3096.7	9.3653	29.897	3096.6	9.3167	26.907	3096.6	9.2325	22.421	3096.5	9.1613	19.217
320	3116.7	9.3994	30.410	3116.7	9.3508	27.369	3116.7	9.2666	22.806	3116.6	9.1954	19.547
330	3136.9	9.4331	30.923	3136.8	9.3845	27.830	3136.8	9.3003	23.191	3136.8	9.2291	19.877
340	3157.1	9.4663	31.436	3157.0	9.4177	28.292	3157.0	9.3335	23.576	3157.0	9.2623	20.207
350	3177.3	9.4991	31.949	3177.3	9.4504	28.754	3177.3	9.3663	23.961	3177.2	9.2951	20.537
360	3197.7	9.5315	32.462	3197.6	9.4828	29.216	3197.6	9.3986	24.346	3197.6	9.3274	20.867
370	3218.0	9.5634	32.975	3218.0	9.5148	29.677	3218.0	9.4306	24.730	3218.0	9.3594	21.197
380	3238.5	9.5950	33.488	3238.5	9.5463	30.139	3238.4	9.4621	25.115	3238.4	9.3910	21.527
390	3259.0	9.6261	34.001	3259.0	9.5775	30.601	3259.0	9.4933	25.500	3258.9	9.4221	21.856
400	3279.6	9.6569	34.514	3279.6	9.6083	31.062	3279.6	9.5241	25.885	3279.5	9.4530	22.186
410	3300.3	9.6874	35.027	3300.2	9.6388	31.524	3300.2	9.5546	26.269	3300.2	9.4834	22.516
420	3321.0	9.7175	35.540	3321.0	9.6689	31.986	3320.9	9.5847	26.654	3320.9	9.5135	22.846
430	3341.8	9.7473	36.053	3341.7	9.6986	32.447	3341.7	9.6145	27.039	3341.7	9.5433	23.176
440	3362.6	9.7767	36.566	3362.6	9.7281	32.909	3362.6	9.6439	27.424	3362.5	9.5727	23.505
450	3383.5	9.8058	37.079	3383.5	9.7572	33.371	3383.5	9.6730	27.808	3383.5	9.6019	23.835
460	3404.5	9.8347	37.592	3404.5	9.7860	33.832	3404.5	9.7019	28.193	3404.4	9.6307	24.165
470	3425.6	9.8632	38.105	3425.6	9.8146	34.294	3425.5	9.7304	28.578	3425.5	9.6592	24.495
480	3446.7	9.8914	38.618	3446.7	9.8428	34.756	3446.7	9.7586	28.962	3446.6	9.6875	24.825
490	3467.9	9.9194	39.131	3467.9	9.8707	35.217	3467.8	9.7866	29.347	3467.8	9.7154	25.154
500	3489.1	9.9471	39.643	3489.1	9.8984	35.679	3489.1	9.8143	29.732	3489.1	9.7431	25.484
510	3510.5	9.9745	40.156	3510.5	9.9258	36.140	3510.4	9.8417	30.117	3510.4	9.7705	25.814
520	3531.9	10.0016	40.669	3531.9	9.9530	36.602	3531.8	9.8688	30.501	3531.8	9.7977	26.144
530	3553.3	10.0285	41.182	3553.3	9.9799	37.064	3553.3	9.8957	30.886	3553.3	9.8246	26.473
540	3574.9	10.0552	41.695	3574.9	10.0065	37.525	3574.8	9.9224	31.271	3574.8	9.8512	26.803
550	3596.5	10.0816	42.208	3596.5	10.0329	37.987	3596.4	9.9488	31.655	3596.4	9.8776	27.133
560	3618.1	10.1077	42.721	3618.1	10.0591	38.448	3618.1	9.9749	32.040	3618.1	9.9038	27.462
570	3639.9	10.1337	43.234	3639.9	10.0851	38.910	3639.9	10.0009	32.425	3639.8	9.9297	27.792
580	3661.7	10.1594	43.746	3661.7	10.1108	39.372	3661.7	10.0266	32.809	3661.7	9.9555	28.122
590	3683.6	10.1849	44.259	3683.6	10.1363	39.833	3683.6	10.0521	33.194	3683.5	9.9810	28.452
600	3705.5	10.2102	44.772	3705.5	10.1616	40.295	3705.5	10.0774	33.579	3705.5	10.0062	28.781

TABLE 3 WATER AND STEAM

p(MPa)	.008			.010			.012			.014		
SAT t(°C)	43.79			45.83			49.45			52.57		
SAT.LIQ	183.3	.6224	.0010094	191.8	.6493	.0010102	206.9	.6963	.0010119	220.0	.7367	.0010133
SAT.VAP	2581.1	8.1881	16.20427	2584.8	8.1511	14.67461	2591.2	8.0872	12.36190	2596.7	8.0334	10.69420
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3727.6	10.2353	45.285	3727.5	10.1866	40.756	3727.5	10.1025	33.963	3727.5	10.0313	29.111
620	3749.6	10.2601	45.798	3749.6	10.2115	41.218	3749.6	10.1273	34.348	3749.6	10.0562	29.441
630	3771.8	10.2848	46.311	3771.8	10.2362	41.679	3771.8	10.1520	34.733	3771.8	10.0809	29.771
640	3794.0	10.3093	46.824	3794.0	10.2606	42.141	3794.0	10.1765	35.117	3794.0	10.1053	30.100
650	3816.3	10.3336	47.336	3816.3	10.2849	42.603	3816.3	10.2008	35.502	3816.3	10.1296	30.430
660	3838.7	10.3577	47.849	3838.7	10.3090	43.064	3838.7	10.2249	35.887	3838.6	10.1537	30.760
670	3861.1	10.3816	48.362	3861.1	10.3329	43.526	3861.1	10.2488	36.271	3861.1	10.1776	31.089
680	3883.6	10.4053	48.875	3883.6	10.3567	43.987	3883.6	10.2725	36.656	3883.6	10.2014	31.419
690	3906.2	10.4288	49.388	3906.2	10.3802	44.449	3906.2	10.2961	37.041	3906.1	10.2249	31.749
700	3928.8	10.4522	49.901	3928.8	10.4036	44.910	3928.8	10.3194	37.425	3928.8	10.2483	32.078
710	3951.5	10.4754	50.413	3951.5	10.4268	45.372	3951.5	10.3426	37.810	3951.5	10.2715	32.408
720	3974.3	10.4985	50.926	3974.3	10.4498	45.834	3974.2	10.3657	38.194	3974.2	10.2945	32.738
730	3997.1	10.5213	51.439	3997.1	10.4727	46.295	3997.1	10.3885	38.579	3997.1	10.3174	33.068
740	4020.0	10.5440	51.952	4020.0	10.4954	46.757	4020.0	10.4113	38.964	4020.0	10.3401	33.397
750	4043.0	10.5666	52.465	4042.9	10.5180	47.218	4042.9	10.4338	39.348	4042.9	10.3627	33.727
760	4066.0	10.5890	52.978	4066.0	10.5404	47.680	4066.0	10.4562	39.733	4065.9	10.3851	34.057
770	4089.1	10.6112	53.490	4089.1	10.5626	48.141	4089.0	10.4784	40.118	4089.0	10.4073	34.386
780	4112.2	10.6333	54.003	4112.2	10.5847	48.603	4112.2	10.5005	40.502	4112.2	10.4294	34.716
790	4135.4	10.6552	54.516	4135.4	10.6066	49.064	4135.4	10.5225	40.887	4135.4	10.4513	35.046
800	4158.7	10.6770	55.029	4158.7	10.6284	49.526	4158.7	10.5443	41.271	4158.7	10.4731	35.375

TABLE 3 WATER AND STEAM

p(MPa)	.016			.018			.020			.022		
SAT t(°C)	55.34			57.83			60.09			62.16		
SAT.LIQ	231.6	.7721	.0010147	242.0	.8036	.0010160	251.5	.8321	.0010172	260.1	.8581	.0010183
SAT.VAP	2601.6	7.9869	9.43314	2605.9	7.9460	8.44522	2609.9	7.9094	7.64977	2613.5	7.8764	6.99514
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	-.0	-.0002	.0010002	-.0	-.0002	.0010002	-.0	-.0002	.0010002	-.0	-.0002	.0010002
10	42.0	.1510	.0010002	42.0	.1510	.0010002	42.0	.1510	.0010002	42.0	.1510	.0010002
20	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017
30	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043
40	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078
50	209.3	.7035	.0010121	209.3	.7035	.0010121	209.3	.7035	.0010121	209.3	.7035	.0010121
60	2610.5	8.0137	9.5697	2610.1	7.9585	8.5020	251.1	.8310	.0010171	251.1	.8310	.0010171
70	2629.5	8.0701	9.8624	2629.2	8.0150	8.7626	2628.8	7.9656	7.8827	2628.5	7.9208	7.1629
80	2648.6	8.1249	10.155	2648.3	8.0699	9.0227	2648.0	8.0206	8.1172	2647.7	7.9759	7.3763
90	2667.7	8.1782	10.446	2667.4	8.1233	9.2823	2667.1	8.0740	8.3512	2666.9	8.0294	7.5893
100	2686.8	8.2301	10.737	2686.5	8.1752	9.5415	2686.3	8.1261	8.5847	2686.0	8.0816	7.8019
110	2705.9	8.2807	11.028	2705.7	8.2258	9.8003	2705.5	8.1768	8.8179	2705.2	8.1323	8.0141
120	2725.0	8.3300	11.319	2724.8	8.2752	10.059	2724.6	8.2262	9.0508	2724.4	8.1818	8.2260
130	2744.2	8.3781	11.609	2744.0	8.3234	10.317	2743.8	8.2744	9.2834	2743.7	8.2301	8.4377
140	2763.4	8.4251	11.899	2763.2	8.3705	10.575	2763.1	8.3215	9.5158	2762.9	8.2772	8.6491
150	2782.6	8.4711	12.189	2782.5	8.4165	10.833	2782.3	8.3676	9.7480	2782.2	8.3233	8.8604
160	2801.9	8.5161	12.479	2801.8	8.4615	11.091	2801.6	8.4127	9.9801	2801.5	8.3684	9.0714
170	2821.2	8.5602	12.768	2821.1	8.5056	11.348	2821.0	8.4568	10.212	2820.8	8.4126	9.2823
180	2840.5	8.6033	13.058	2840.4	8.5488	11.606	2840.3	8.5000	10.444	2840.2	8.4558	9.4931
190	2859.9	8.6457	13.347	2859.8	8.5911	11.863	2859.7	8.5423	10.675	2859.6	8.4982	9.7038
200	2879.4	8.6872	13.636	2879.3	8.6326	12.120	2879.2	8.5839	10.907	2879.1	8.5397	9.9144
210	2898.8	8.7279	13.926	2898.7	8.6734	12.377	2898.7	8.6246	11.138	2898.6	8.5805	10.125
220	2918.4	8.7679	14.215	2918.3	8.7134	12.634	2918.2	8.6647	11.370	2918.1	8.6206	10.335
230	2937.9	8.8072	14.504	2937.9	8.7527	12.891	2937.8	8.7040	11.601	2937.7	8.6599	10.546
240	2957.6	8.8458	14.793	2957.5	8.7914	13.148	2957.4	8.7426	11.832	2957.4	8.6985	10.756
250	2977.2	8.8838	15.082	2977.2	8.8293	13.405	2977.1	8.7806	12.064	2977.0	8.7366	10.966
260	2997.0	8.9212	15.371	2996.9	8.8667	13.662	2996.9	8.8180	12.295	2996.8	8.7739	11.176
270	3016.8	8.9579	15.659	3016.7	8.9035	13.919	3016.7	8.8548	12.526	3016.6	8.8107	11.387
280	3036.6	8.9941	15.948	3036.6	8.9397	14.175	3036.5	8.8910	12.757	3036.5	8.8470	11.597
290	3056.5	9.0298	16.237	3056.5	8.9754	14.432	3056.4	8.9267	12.988	3056.4	8.8826	11.807
300	3076.5	9.0649	16.526	3076.4	9.0105	14.689	3076.4	8.9618	13.219	3076.3	8.9178	12.017

TABLE 3 WATER AND STEAM

p(MPa) =	.016			.018			.020			.022		
SAT t(°C)	55.34			57.83			60.09			62.16		
SAT.LIQ	231.6	.7721	.0010147	242.0	.8036	.0010160	251.5	.8321	.0010172	260.1	.8581	.0010183
SAT.VAP	2601.6	7.9869	9.43314	2605.9	7.9460	8.44522	2609.9	7.9094	7.64977	2613.5	7.8764	6.99514
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3096.5	9.0996	16.815	3096.5	9.0452	14.946	3096.4	8.9965	13.450	3096.4	8.9524	12.227
320	3116.6	9.1337	17.103	3116.5	9.0793	15.202	3116.5	9.0306	13.681	3116.5	8.9866	12.437
330	3136.7	9.1674	17.392	3136.7	9.1130	15.459	3136.6	9.0643	13.912	3136.6	9.0203	12.647
340	3156.9	9.2006	17.681	3156.9	9.1462	15.715	3156.9	9.0975	14.143	3156.8	9.0535	12.857
350	3177.2	9.2334	17.969	3177.2	9.1790	15.972	3177.1	9.1303	14.374	3177.1	9.0863	13.067
360	3197.5	9.2658	18.258	3197.5	9.2114	16.229	3197.5	9.1627	14.605	3197.4	9.1187	13.277
370	3217.9	9.2977	18.547	3217.9	9.2433	16.485	3217.9	9.1947	14.836	3217.8	9.1506	13.487
380	3238.4	9.3293	18.835	3238.3	9.2749	16.742	3238.3	9.2262	15.067	3238.3	9.1822	13.697
390	3258.9	9.3605	19.124	3258.9	9.3061	16.998	3258.8	9.2574	15.298	3258.8	9.2134	13.907
400	3279.5	9.3913	19.412	3279.5	9.3369	17.255	3279.4	9.2882	15.529	3279.4	9.2442	14.117
410	3300.1	9.4218	19.701	3300.1	9.3674	17.512	3300.1	9.3187	15.760	3300.1	9.2747	14.327
420	3320.9	9.4519	19.990	3320.8	9.3975	17.768	3320.8	9.3488	15.991	3320.8	9.3048	14.537
430	3341.7	9.4816	20.278	3341.6	9.4273	18.025	3341.6	9.3786	16.222	3341.6	9.3346	14.747
440	3362.5	9.5111	20.567	3362.5	9.4567	18.281	3362.5	9.4081	16.453	3362.4	9.3640	14.957
450	3363.4	9.5402	20.855	3383.4	9.4858	18.538	3383.4	9.4372	16.684	3383.4	9.3932	15.167
460	3404.4	9.5690	21.144	3404.4	9.5147	18.794	3404.4	9.4660	16.914	3404.3	9.4220	15.377
470	3425.5	9.5976	21.433	3425.5	9.5432	19.051	3425.4	9.4945	17.145	3425.4	9.4505	15.586
480	3446.6	9.6258	21.721	3446.6	9.5714	19.307	3446.6	9.5228	17.376	3446.5	9.4788	15.796
490	3467.8	9.6538	22.010	3467.8	9.5994	19.564	3467.8	9.5507	17.607	3467.7	9.5067	16.006
500	3489.1	9.6814	22.298	3489.0	9.6271	19.820	3489.0	9.5784	17.838	3489.0	9.5344	16.216
610	3510.4	9.7089	22.587	3510.4	9.6545	20.077	3510.3	9.6058	18.069	3510.3	9.5618	16.426
520	3531.8	9.7360	22.875	3531.8	9.6816	20.333	3531.8	9.6330	18.300	3531.7	9.5890	16.636
530	3553.3	9.7629	23.164	3553.2	9.7085	20.590	3553.2	9.6599	18.531	3553.2	9.6159	16.846
540	3574.8	9.7896	23.452	3574.8	9.7352	20.846	3574.8	9.6865	18.761	3574.7	9.6425	17.056
550	3596.4	9.8160	23.741	3596.4	9.7616	21.103	3596.4	9.7130	18.992	3596.3	9.6690	17.265
560	3618.1	9.8421	24.029	3618.1	9.7878	21.359	3618.0	9.7391	19.223	3618.0	9.6951	17.475
570	3639.8	9.8681	24.318	3639.8	9.8137	21.616	3639.8	9.7651	19.454	3639.8	9.7211	17.685
580	3661.6	9.8938	24.606	3661.6	9.8394	21.872	3661.6	9.7908	19.685	3661.6	9.7468	17.895
590	3683.5	9.9193	24.895	3683.5	9.8649	22.129	3683.5	9.8163	19.916	3683.5	9.7723	18.105
600	3705.5	9.9446	25.183	3705.5	9.8902	22.385	3705.4	9.8416	20.146	3705.4	9.7976	18.315

TABLE 3 WATER AND STEAM

p(MPa) =	.016			.018			.020			.022		
SAT t(°C)		55.34			57.83			60.09			62.16	
SAT.LIQ	231.6	.7721	.0010147	242.0	.8036	.0010160	251.5	.8321	.0010172	260.1	.8581	.0010183
SAT.VAP	2601.6	7.9869	9.43314	2605.9	7.9460	8.44522	2609.9	7.9094	7.64977	2613.5	7.8764	6.99514
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3727.5	9.9697	25.472	3727.5	9.9153	22.642	3727.5	9.8667	20.377	3727.5	9.8227	18.525
620	3749.6	9.9946	25.761	3749.6	9.9402	22.898	3749.6	9.8915	20.608	3749.5	9.8475	18.734
630	3771.7	10.0192	26.049	3771.7	9.9649	23.154	3771.7	9.9162	20.839	3771.7	9.8722	18.944
640	3794.0	10.0437	26.338	3794.0	9.9893	23.411	3793.9	9.9407	21.070	3793.9	9.8967	19.154
650	3816.3	10.0680	26.626	3816.3	10.0136	23.667	3816.2	9.9650	21.300	3816.2	9.9210	19.364
660	3838.6	10.0921	26.915	3838.6	10.0377	23.924	3838.6	9.9891	21.531	3838.6	9.9451	19.574
670	3861.1	10.1160	27.203	3861.1	10.0616	24.180	3861.0	10.0130	21.762	3861.0	9.9690	19.784
680	3883.6	10.1397	27.492	3883.6	10.0853	24.437	3883.5	10.0367	21.993	3883.5	9.9927	19.993
690	3906.1	10.1633	27.780	3906.1	10.1089	24.693	3906.1	10.0603	22.224	3906.1	10.0163	20.203
700	3928.8	10.1866	28.069	3928.7	10.1323	24.950	3928.7	10.0836	22.455	3928.7	10.0396	20.413
710	3951.5	10.2098	28.357	3951.4	10.1555	25.206	3951.4	10.1068	22.685	3951.4	10.0629	20.623
720	3974.2	10.2329	28.645	3974.2	10.1785	25.463	3974.2	10.1299	22.916	3974.2	10.0859	20.833
730	3997.1	10.2558	28.934	3997.0	10.2014	25.719	3997.0	10.1528	23.147	3997.0	10.1088	21.043
740	4020.0	10.2785	29.222	4019.9	10.2241	25.975	4019.9	10.1755	23.378	4019.9	10.1315	21.252
750	4042.9	10.3010	29.511	4042.9	10.2467	26.232	4042.9	10.1980	23.609	4042.9	10.1540	21.462
760	4065.9	10.3234	29.799	4065.9	10.2691	26.488	4065.9	10.2204	23.839	4065.9	10.1764	21.672
770	4089.0	10.3457	30.088	4089.0	10.2913	26.745	4089.0	10.2427	24.070	4089.0	10.1987	21.882
780	4112.2	10.3677	30.376	4112.2	10.3134	27.001	4112.2	10.2647	24.301	4112.2	10.2208	22.092
790	4135.4	10.3897	30.665	4135.4	10.3353	27.258	4135.4	10.2867	24.532	4135.4	10.2427	22.301
800	4158.7	10.4115	30.953	4158.7	10.3571	27.514	4158.7	10.3085	24.762	4158.6	10.2645	22.511

TABLE 3 WATER AND STEAM

p(MPa) =	.024			.026			.028			.030		
SAT t(°C)	64.08			65.87			67.55			69.12		
SAT.LIQ	268.2	.8820	.0010194	275.7	.9041	.0010204	282.7	.9248	.0010214	289.3	.9441	.0010223
SAT.VAP	2616.8	7.8464	6.44670	2619.9	7.8188	5.98035	2622.7	7.7933	5.57879	2625.4	7.7695	5.22930
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	-.0	-.0002	.0010002	-.0	-.0002	.0010002	-.0	-.0002	.0010002	-.0	-.0002	.0010002
10	42.0	.1510	.0010002	42.0	.1510	.0010002	42.0	.1510	.0010002	42.0	.1510	.0010002
20	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017
30	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043
40	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078
50	209.3	.7035	.0010121	209.3	.7035	.0010121	209.3	.7035	.0010121	209.3	.7035	.0010121
60	251.1	.8310	.0010171	251.1	.8310	.0010171	251.1	.8310	.0010171	251.1	.8310	.0010171
70	2628.2	7.8798	6.5629	2627.8	7.8421	6.0553	2627.5	7.8071	5.6202	2627.1	7.7745	5.2431
80	2647.4	7.9350	6.7589	2647.1	7.8974	6.2365	2646.8	7.8625	5.7888	2646.5	7.8300	5.4007
90	2666.6	7.9887	6.9545	2666.3	7.9511	6.4173	2666.0	7.9163	5.9568	2665.8	7.8839	5.5578
100	2685.8	8.0409	7.1496	2685.6	8.0034	6.5976	2685.3	7.9687	6.1245	2685.1	7.9363	5.7144
110	2705.0	8.0917	7.3443	2704.8	8.0543	6.7775	2704.6	8.0196	6.2917	2704.3	7.9873	5.8707
120	2724.2	8.1412	7.5388	2724.0	8.1039	6.9572	2723.8	8.0693	6.4587	2723.6	8.0370	6.0267
130	2743.5	8.1896	7.7329	2743.3	8.1523	7.1366	2743.1	8.1177	6.6254	2742.9	8.0855	6.1824
140	2762.8	8.2368	7.9269	2762.6	8.1995	7.3157	2762.4	8.1650	6.7919	2762.3	8.1329	6.3379
150	2782.0	8.2829	8.1206	2781.9	8.2457	7.4947	2781.7	8.2112	6.9582	2781.6	8.1791	6.4932
160	2801.4	8.3280	8.3142	2801.2	8.2908	7.6735	2801.1	8.2564	7.1243	2801.0	8.2243	6.6483
170	2820.7	8.3722	8.5076	2820.6	8.3350	7.8521	2820.5	8.3006	7.2903	2820.3	8.2686	6.8033
180	2840.1	8.4154	8.7010	2840.0	8.3783	8.0306	2839.9	8.3439	7.4561	2839.8	8.3119	6.9582
190	2859.5	8.4578	8.8941	2859.4	8.4207	8.2091	2859.3	8.3864	7.6218	2859.2	8.3544	7.1129
200	2879.0	8.4994	9.0872	2878.9	8.4623	8.3874	2878.8	8.4280	7.7875	2878.7	8.3960	7.2675
210	2898.5	8.5402	9.2803	2898.4	8.5031	8.5656	2898.3	8.4688	7.9530	2898.2	8.4368	7.4221
220	2918.0	8.5803	9.4732	2918.0	8.5432	8.7437	2917.9	8.5089	8.1185	2917.8	8.4769	7.5766
230	2937.6	8.6196	9.6661	2937.6	8.5826	8.9218	2937.5	8.5483	8.2839	2937.4	8.5163	7.7310
240	2957.3	8.6583	9.8589	2957.2	8.6212	9.0999	2957.1	8.5869	8.4493	2957.1	8.5550	7.8854
250	2977.0	8.6963	10.052	2976.9	8.6593	9.2779	2976.9	8.6250	8.6146	2976.8	8.5930	8.0397
260	2996.7	8.7337	10.244	2996.7	8.6967	9.4558	2996.6	8.6624	8.7798	2996.6	8.6305	8.1940
270	3016.5	8.7705	10.437	3016.5	8.7335	9.6337	3016.4	8.6992	8.9451	3016.4	8.6673	8.3482
280	3036.4	8.8067	10.630	3036.3	8.7697	9.8116	3036.3	8.7355	9.1103	3036.2	8.7035	8.5024
290	3056.3	8.8424	10.822	3056.3	8.8054	9.9894	3056.2	8.7711	9.2754	3056.2	8.7392	8.6566
300	3076.3	8.8776	11.015	3076.2	8.8406	10.167	3076.2	8.8063	9.4406	3076.1	8.7744	8.8108

TABLE 3 WATER AND STEAM

p(MPa) =	.024			.026			.028			.030		
SAT t(°C)	64.08			65.87			67.55			69.12		
SAT.LIQ	268.2	.8820	.0010194	275.7	.9041	.0010204	282.7	.9248	.0010214	289.3	.9441	.0010223
SAT.VAP	2616.8	7.8464	6.44670	2619.9	7.8188	5.98035	2622.7	7.7933	5.57879	2625.4	7.7695	5.22930
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3096.3	8.9122	11.208	3096.3	8.8752	10.345	3096.2	8.8410	9.6057	3096.2	8.8091	3.9649
320	3116.4	8.9464	11.400	3116.4	8.9094	10.523	3116.3	8.8751	9.7708	3116.3	8.8432	9.1190
330	3136.6	8.9801	11.593	3136.5	8.9431	10.701	3136.5	8.9088	9.9359	3136.4	8.8769	9.2731
340	3156.8	9.0133	11.785	3156.7	8.9763	10.878	3156.7	8.9421	10.101	3156.7	8.9102	9.4272
350	3177.0	9.0461	11.978	3177.0	9.0091	11.056	3177.0	8.9749	10.266	3176.9	8.9430	9.5812
360	3197.4	9.0785	12.170	3197.4	9.0415	11.234	3197.3	9.0073	10.431	3197.3	8.9754	9.7353
370	3217.8	9.1104	12.363	3217.8	9.0735	11.411	3217.7	9.0392	10.596	3217.7	9.0074	9.8893
380	3238.2	9.1420	12.555	3238.2	9.1050	11.589	3238.2	9.0708	10.761	3238.2	9.0389	10.043
390	3258.8	9.1732	12.748	3258.7	9.1362	11.767	3258.7	9.1020	10.926	3258.7	9.0701	10.197
400	3279.4	9.2040	12.940	3279.3	9.1671	11.945	3279.3	9.1328	11.091	3279.3	9.1010	10.351
410	3300.0	9.2345	13.133	3300.0	9.1975	12.122	3300.0	9.1633	11.256	3299.9	9.1314	10.505
420	3320.8	9.2646	13.325	3320.7	9.2276	12.300	3320.7	9.1934	11.421	3320.7	9.1615	10.659
430	3341.5	9.2944	13.518	3341.5	9.2574	12.477	3341.5	9.2232	11.586	3341.5	9.1913	10.813
440	3362.4	9.3239	13.710	3362.4	9.2869	12.655	3362.4	9.2527	11.751	3362.3	9.2208	10.967
450	3383.3	9.3530	13.902	3383.3	9.3160	12.833	3383.3	9.2818	11.916	3383.3	9.2499	11.121
460	3404.3	9.3818	14.095	3404.3	9.3449	13.010	3404.3	9.3106	12.081	3404.2	9.2788	11.275
470	3425.4	9.4104	14.287	3425.4	9.3734	13.188	3425.3	9.3392	12.246	3425.3	9.3073	11.429
480	3446.5	9.4386	14.480	3446.5	9.4016	13.366	3446.5	9.3674	12.411	3446.4	9.3355	11.583
490	3467.7	9.4666	14.672	3467.7	9.4296	13.543	3467.7	9.3954	12.576	3467.6	9.3635	11.737
500	3489.0	9.4942	14.865	3489.0	9.4573	13.721	3488.9	9.4231	12.741	3488.9	9.3912	11.891
510	3510.3	9.5217	15.057	3510.3	9.4847	13.898	3510.3	9.4505	12.906	3510.2	9.4186	12.045
520	3531.7	9.5488	15.249	3531.7	9.5119	14.076	3531.7	9.4776	13.070	3531.6	9.4458	12.199
530	3553.2	9.5757	15.442	3553.2	9.5388	14.254	3553.1	9.5045	13.235	3553.1	9.4727	12.353
540	3574.7	9.6024	15.634	3574.7	9.5654	14.431	3574.7	9.5312	13.400	3574.7	9.4993	12.507
550	3596.3	9.6288	15.826	3596.3	9.5918	14.609	3596.3	9.5576	13.565	3596.3	9.5257	12.661
560	3618.0	9.6550	16.019	3618.0	9.6180	14.786	3618.0	9.5838	13.730	3618.0	9.5519	12.815
570	3639.8	9.6809	16.211	3639.7	9.6439	14.964	3639.7	9.6097	13.895	3639.7	9.5779	12.969
580	3661.6	9.7066	16.404	3661.6	9.6697	15.142	3661.5	9.6355	14.060	3661.5	9.6036	13.122
590	3683.5	9.7321	16.596	3683.4	9.6952	15.319	3683.4	9.6610	14.225	3683.4	9.6291	13.276
600	3705.4	9.7574	16.788	3705.4	9.7205	15.497	3705.4	9.6862	14.390	3705.4	9.6544	13.430

TABLE 3 WATER AND STEAM

p(MPa) =	.024			.026			.028			.030		
SAT t(°C)	64.08			65.87			67.55			69.12		
SAT.LIQ	268.2	.8820	.0010194	275.7	.9041	.0010204	282.7	.9248	.0010214	289.3	.9441	.0010223
SAT.VAP	2616.8	7.8464	6.44670	2619.9	7.8188	5.98035	2622.7	7.7933	5.57879	2625.4	7.7695	5.22930
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3727.4	9.7825	16.981	3727.4	9.7455	15.674	3727.4	9.7113	14.555	3727.4	9.6795	13.584
620	3749.5	9.8074	17.173	3749.5	9.7704	15.852	3749.5	9.7362	14.719	3749.5	9.7043	13.738
630	3771.7	9.8320	17.365	3771.7	9.7951	16.029	3771.7	9.7609	14.884	3771.6	9.7290	13.892
640	3793.9	9.8565	17.558	3793.9	9.8196	16.207	3793.9	9.7854	15.049	3793.9	9.7535	14.046
650	3816.2	9.8808	17.750	3816.2	9.8439	16.385	3816.2	9.8096	15.214	3816.2	9.7778	14.200
660	3838.6	9.9049	17.942	3838.6	9.8680	16.562	3838.6	9.8337	15.379	3838.5	9.8019	14.354
670	3861.0	9.9288	18.135	3861.0	9.8919	16.740	3861.0	9.8577	15.544	3861.0	9.8258	14.508
680	3883.5	9.9525	18.327	3883.5	9.9156	16.917	3883.5	9.8814	15.709	3883.5	9.8495	14.661
690	3906.1	9.9761	18.520	3906.1	9.9391	17.095	3906.1	9.9049	15.874	3906.0	9.8731	14.815
700	3928.7	9.9995	18.712	3928.7	9.9625	17.272	3928.7	9.9283	16.039	3928.7	9.8965	14.969
710	3951.4	10.0227	18.904	3951.4	9.9857	17.450	3951.4	9.9515	16.203	3951.4	9.9197	15.123
720	3974.2	10.0457	19.097	3974.2	10.0088	17.627	3974.2	9.9746	16.368	3974.1	9.9427	15.277
730	3997.0	10.0686	19.289	3997.0	10.0316	17.805	3997.0	9.9974	16.533	3997.0	9.9656	15.431
740	4019.9	10.0913	19.481	4019.9	10.0544	17.983	4019.9	10.0202	16.698	4019.9	9.9883	15.585
750	4042.9	10.1139	19.674	4042.9	10.0769	18.160	4042.8	10.0427	16.863	4042.8	10.0109	15.739
760	4065.9	10.1363	19.866	4065.9	10.0993	18.338	4065.9	10.0651	17.028	4065.9	10.0333	15.893
770	4089.0	10.1585	20.058	4089.0	10.1216	18.515	4089.0	10.0873	17.193	4089.0	10.0555	16.046
780	4112.1	10.1806	20.251	4112.1	10.1436	18.693	4112.1	10.1094	17.357	4112.1	10.0776	16.200
790	4135.4	10.2025	20.443	4135.3	10.1656	18.870	4135.3	10.1314	17.522	4135.3	10.0995	16.354
800	4158.6	10.2243	20.635	4158.6	10.1874	19.048	4158.6	10.1532	17.687	4158.6	10.1213	16.508

TABLE 3 WATER AND STEAM

p(MPa) =	.032			.034			.036			.038		
SAT t(°C)	70.61			72.03			73.37			74.66		
SAT.LIQ	295.5	.9623	.0010232	301.5	.9795	.0010241	307.1	.9958	.0010249	312.5	1.0113	.0010257
SAT.VAP	2628.0	7.7474	4.92228	2630.4	7.7266	4.65036	2632.6	7.7070	4.40779	2634.8	7.6884	4.19003
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	.0	-.0002	.0010002	.0	-.0002	.0010002	.0	-.0002	.0010002	.0	-.0002	.0010002
10	42.0	.1510	.0010002	42.0	.1510	.0010002	42.0	.1510	.0010002	42.0	.1510	.0010002
20	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017
30	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043
40	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078
50	209.3	.7035	.0010121	209.3	.7035	.0010121	209.3	.7035	.0010121	209.3	.7035	.0010121
60	251.1	.8310	.0010171	251.1	.8310	.0010171	251.1	.8310	.0010171	251.1	.8310	.0010171
70	293.0	.9548	.0010228	293.0	.9548	.0010228	293.0	.9548	.0010228	293.0	.9548	.0010228
80	2646.1	7.7995	5.0611	2645.8	7.7708	4.7615	2645.5	7.7438	4.4952	2645.2	7.7181	4.2569
90	2665.5	7.8535	5.2086	2665.2	7.8249	4.9005	2664.9	7.7979	4.6266	2664.6	7.7724	4.3816
100	2684.8	7.9060	5.3556	2684.6	7.8775	5.0390	2684.3	7.8506	4.7576	2684.1	7.8251	4.5058
110	2704.1	7.9571	5.5023	2703.9	7.9287	5.1772	2703.7	7.9018	4.8883	2703.5	7.8764	4.6298
120	2723.4	8.0069	5.6487	2723.2	7.9785	5.3151	2723.0	7.9517	5.0187	2722.8	7.9263	4.7534
130	2742.8	8.0554	5.7948	2742.6	8.0271	5.4528	2742.4	8.0003	5.1487	2742.2	7.9750	4.8767
140	2762.1	8.1028	5.9407	2761.9	8.0745	5.5902	2761.8	8.0478	5.2786	2761.6	8.0225	4.9998
150	2781.4	8.1490	6.0864	2781.3	8.1208	5.7274	2781.1	8.0941	5.4083	2781.0	8.0689	5.1227
160	2800.8	8.1943	6.2319	2800.7	8.1661	5.8644	2800.5	8.1394	5.5378	2800.4	8.1143	5.2455
170	2820.2	8.2386	6.3772	2820.1	8.2104	6.0013	2820.0	8.1838	5.6671	2819.8	8.1586	5.3681
180	2839.6	8.2819	6.5225	2839.5	8.2537	6.1380	2839.4	8.2272	5.7963	2839.3	8.2020	5.4906
190	2859.1	8.3244	6.6676	2859.0	8.2962	6.2747	2858.9	8.2697	5.9254	2858.8	8.2446	5.6129
200	2878.6	8.3660	6.8126	2878.5	8.3379	6.4112	2878.4	8.3114	6.0544	2878.3	8.2863	5.7352
210	2898.1	8.4069	6.9576	2898.1	8.3788	6.5477	2898.0	8.3523	6.1833	2897.9	8.3272	5.8573
220	2917.7	8.4470	7.1024	2917.6	8.4189	6.6841	2917.6	8.3924	6.3122	2917.5	8.3673	5.9794
230	2937.3	8.4864	7.2472	2937.3	8.4583	6.8204	2937.2	8.4318	6.4410	2937.1	8.4068	6.1015
240	2957.0	8.5251	7.3920	2956.9	8.4970	6.9567	2956.9	8.4706	6.5697	2956.8	8.4455	6.2235
250	2976.7	8.5632	7.5367	2976.7	8.5351	7.0929	2976.6	8.5086	6.6984	2976.5	8.4836	6.3454
260	2996.5	8.6006	7.6814	2996.4	8.5725	7.2291	2996.4	8.5461	6.8270	2996.3	8.5210	6.4673
270	3016.3	8.6374	7.8260	3016.3	8.6094	7.3652	3016.2	8.5829	6.9556	3016.1	8.5579	6.5891
280	3036.2	8.6737	7.9706	3036.1	8.6456	7.5013	3036.1	8.6192	7.0842	3036.0	8.5942	6.7110
290	3056.1	8.7094	8.1152	3056.1	8.6813	7.6374	3056.0	8.6549	7.2127	3056.0	8.6299	6.8328
300	3076.1	8.7446	8.2597	3076.1	8.7165	7.7735	3076.0	8.6901	7.3412	3076.0	8.6651	6.9545

TABLE 3 WATER AND STEAM

p(MPa) =	.032			.034			.036			.038		
SAT t(°C)	70.61			72.03			73.37			74.66		
SAT.LIQ	295.5	.9623	.0010232	301.5	.9795	.0010241	307.1	.9958	.0010249	312.5	1.0113	.0010257
SAT.VAP	2628.0	7.7474	4.92228	2630.4	7.7266	4.65036	2632.6	7.7070	4.40779	2634.8	7.6884	4.19003
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3096.1	8.7792	8.4042	3096.1	8.7512	7.9095	3096.0	8.7248	7.4697	3096.0	8.6997	7.0763
320	3116.2	8.8134	8.5487	3116.2	8.7854	8.0455	3116.2	8.7589	7.5982	3116.1	8.7339	7.1980
330	3136.4	8.8471	8.6932	3136.4	8.8191	8.1815	3136.3	8.7926	7.7266	3136.3	8.7676	7.3197
340	3156.6	8.8804	8.8376	3156.6	8.8523	8.3175	3156.5	8.8259	7.8551	3156.5	8.8009	7.4414
350	3176.9	8.9132	8.9821	3176.9	8.8851	8.4534	3176.8	8.8587	7.9835	3176.8	8.8337	7.5631
360	3197.2	8.9456	9.1265	3197.2	8.9175	8.5894	3197.2	8.8911	8.1119	3197.1	8.8661	7.6847
370	3217.6	8.9775	9.2709	3217.6	8.9495	8.7253	3217.6	8.9231	8.2403	3217.5	8.8981	7.8064
380	3238.1	9.0091	9.4153	3238.1	8.9811	8.8612	3238.1	8.9547	8.3687	3238.0	8.9297	7.9280
390	3258.7	9.0403	9.5597	3258.6	9.0123	8.9972	3258.6	8.9859	8.4971	3258.6	8.9609	8.0496
400	3279.2	9.0711	9.7041	3279.2	9.0431	9.1331	3279.2	9.0167	8.6254	3279.2	8.9917	8.1712
410	3299.9	9.1016	9.8485	3299.9	9.0736	9.2690	3299.9	9.0472	8.7538	3299.8	9.0222	8.2929
420	3320.6	9.1317	9.9929	3320.6	9.1037	9.4048	3320.6	9.0773	8.8821	3320.6	9.0523	8.4145
430	3341.4	9.1615	10.137	3341.4	9.1335	9.5407	3341.4	9.1071	9.0105	3341.4	9.0821	8.5361
440	3362.3	9.1910	10.282	3362.3	9.1630	9.6766	3362.2	9.1366	9.1388	3362.2	9.1116	8.6576
450	3383.2	9.2201	10.426	3383.2	9.1921	9.8125	3383.2	9.1657	9.2671	3383.2	9.1407	8.7792
460	3404.2	9.2490	10.570	3404.2	9.2210	9.9483	3404.2	9.1945	9.3955	3404.1	9.1696	8.9008
470	3425.3	9.2775	10.715	3425.3	9.2495	10.084	3425.2	9.2231	9.5238	3425.2	9.1981	9.0224
480	3446.4	9.3057	10.859	3446.4	9.2777	10.220	3446.4	9.2513	9.6521	3446.3	9.2264	9.1439
490	3467.6	9.3337	11.003	3467.6	9.3057	10.356	3467.6	9.2793	9.7804	3467.6	9.2543	9.2655
500	3488.9	9.3614	11.148	3488.9	9.3334	10.492	3488.8	9.3070	9.9087	3488.8	9.2820	9.3871
510	3510.2	9.3888	11.292	3510.2	9.3608	10.628	3510.2	9.3344	10.037	3510.2	9.3094	9.5086
520	3531.6	9.4160	11.436	3531.6	9.3880	10.763	3531.6	9.3616	10.165	3531.6	9.3366	9.6302
530	3553.1	9.4429	11.581	3553.1	9.4149	10.899	3553.1	9.3885	10.294	3553.0	9.3635	9.7517
540	3574.6	9.4695	11.725	3574.6	9.4415	11.035	3574.6	9.4151	10.422	3574.6	9.3902	9.8732
550	3596.3	9.4959	11.869	3596.2	9.4679	11.171	3596.2	9.4415	10.550	3596.2	9.4166	9.9948
560	3617.9	9.5221	12.014	3617.9	9.4941	11.307	3617.9	9.4677	10.678	3617.9	9.4428	10.116
570	3639.7	9.5481	12.158	3639.7	9.5201	11.443	3639.6	9.4937	10.807	3639.6	9.4687	10.238
580	3661.5	9.5738	12.302	3661.5	9.5458	11.578	3661.5	9.5194	10.935	3661.5	9.4944	10.359
590	3683.4	9.5993	12.446	3683.4	9.5713	11.714	3683.4	9.5449	11.063	3683.3	9.5199	10.481
600	3705.3	9.6246	12.591	3705.3	9.5966	11.850	3705.3	9.5702	11.192	3705.3	9.5452	10.602

TABLE 3 WATER AND STEAM

p(MPa)	.032			.034			.036			.038		
SAT t(°C)	70.61			72.03			73.37			74.66		
SAT.LIQ	295.5	.9623	.0010232	301.5	.9795	.0010241	307.1	.9958	.0010249	312.5	1.0113	.0010257
SAT.VAP	2628.0	7.7474	4.92228	2630.4	7.7266	4.65036	2632.6	7.7070	4.40779	2634.8	7.6884	4.19003
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3727.4	9.6497	12.735	3727.4	9.6217	11.986	3727.3	9.5953	11.320	3727.3	9.5703	10.724
620	3749.5	9.6746	12.879	3749.5	9.6466	12.122	3749.4	9.6202	11.448	3749.4	9.5952	10.845
630	3771.6	9.6992	13.024	3771.6	9.6712	12.257	3771.6	9.6448	11.576	3771.6	9.6199	10.967
640	3793.9	9.7237	13.168	3793.8	9.6957	12.393	3793.8	9.6693	11.705	3793.8	9.6444	11.088
650	3816.2	9.7480	13.312	3816.1	9.7200	12.529	3816.1	9.6936	11.833	3816.1	9.6686	11.210
660	3838.5	9.7721	13.456	3838.5	9.7441	12.665	3838.5	9.7177	11.961	3838.5	9.6927	11.332
670	3861.0	9.7960	13.601	3860.9	9.7680	12.801	3860.9	9.7416	12.089	3860.9	9.7167	11.453
680	3883.5	9.8197	13.745	3883.4	9.7917	12.936	3883.4	9.7654	12.218	3883.4	9.7404	11.575
690	3906.0	9.8433	13.889	3906.0	9.8153	13.072	3906.0	9.7889	12.346	3906.0	9.7639	11.696
700	3928.7	9.8667	14.034	3928.7	9.8387	13.208	3928.6	9.8123	12.474	3928.6	9.7873	11.818
710	3951.4	9.8899	14.178	3951.4	9.8619	13.344	3951.3	9.8355	12.602	3951.3	9.8105	11.939
720	3974.1	9.9129	14.322	3974.1	9.8849	13.480	3974.1	9.8585	12.731	3974.1	9.8336	12.061
730	3997.0	9.9358	14.466	3997.0	9.9078	13.615	3996.9	9.8814	12.859	3996.9	9.8565	12.182
740	4019.9	9.9585	14.611	4019.9	9.9305	13.751	4019.8	9.9041	12.987	4019.8	9.8792	12.303
750	4042.8	9.9811	14.755	4042.8	9.9531	13.887	4042.8	9.9267	13.115	4042.8	9.9017	12.425
760	4065.9	10.0035	14.899	4065.8	9.9755	14.023	4065.8	9.9491	13.244	4065.8	9.9241	12.546
770	4088.9	10.0257	15.043	4088.9	9.9977	14.158	4088.9	9.9713	13.372	4088.9	9.9464	12.668
780	4112.1	10.0478	15.188	4112.1	10.0198	14.294	4112.1	9.9934	13.500	4112.1	9.9685	12.789
790	4135.3	10.0697	15.332	4135.3	10.0417	14.430	4135.3	10.0154	13.628	4135.3	9.9904	12.911
800	4158.6	10.0915	15.476	4158.6	10.0635	14.566	4158.6	10.0372	13.757	4158.6	10.0122	13.032

TABLE 3 WATER AND STEAM

p(MPa)	.04			.042			.044			.046		
SAT t(°C)	75.89			77.06			78.19			79.28		
SAT.LIQ	317.7	1.0261	.0010265	322.6	1.0402	.0010273	327.3	1.0537	.0010280	331.9	1.0667	.0010287
SAT.VAP	2636.9	7.6709	3.99342	2638.9	7.6542	3.81500	2640.7	7.6383	3.65232	2642.6	7.6232	3.50338
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	.0	-.0002	.0010002	.0	-.0002	.0010002	.0	-.0002	.0010002	.0	-.0002	.0010002
10	42.0	.1510	.0010002	42.0	.1510	.0010002	42.0	.1510	.0010002	42.0	.1510	.0010002
20	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017
30	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043
40	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078
50	209.3	.7035	.0010121	209.3	.7035	.0010121	209.3	.7035	.0010121	209.3	.7035	.0010121
60	251.1	.8310	.0010171	251.1	.8310	.0010171	251.1	.8310	.0010171	251.1	.8310	.0010171
70	293.0	.9548	.0010228	293.0	.9548	.0010228	293.0	.9548	.0010228	293.0	.9548	.0010228
80	2644.9	7.6937	4.0424	2644.6	7.6705	3.8463	2644.3	7.6484	3.6719	2644.0	7.6271	3.5108
90	2664.4	7.7481	4.1610	2664.1	7.7250	3.9615	2663.8	7.7029	3.7801	2663.5	7.6818	3.6144
100	2683.8	7.8009	4.2792	2683.6	7.7779	4.0742	2683.3	7.7559	3.8878	2683.1	7.7348	3.7176
110	2703.2	7.8523	4.3971	2703.0	7.8293	4.1866	2702.8	7.8074	3.9952	2702.6	7.7864	3.8204
120	2722.6	7.9023	4.5146	2722.4	7.8793	4.2986	2722.2	7.8575	4.1022	2722.0	7.8365	3.9229
130	2742.0	7.9510	4.6319	2741.9	7.9281	4.4104	2741.7	7.9063	4.2090	2741.5	7.8854	4.0252
140	2761.4	7.9985	4.7489	2761.3	7.9757	4.5219	2761.1	7.9539	4.3156	2760.9	7.9331	4.1272
150	2780.9	8.0450	4.8658	2780.7	8.0222	4.6333	2780.6	8.0004	4.4219	2780.4	7.9796	4.2290
160	2800.3	8.0903	4.9825	2800.1	8.0676	4.7445	2800.0	8.0459	4.5281	2799.9	8.0251	4.3306
170	2819.7	8.1347	5.0990	2819.6	8.1120	4.8555	2819.5	8.0903	4.6342	2819.4	8.0696	4.4321
180	2839.2	8.1782	5.2154	2839.1	8.1555	4.9664	2839.0	8.1338	4.7401	2838.9	8.1131	4.5334
190	2858.7	8.2207	5.3317	2858.6	8.1980	5.0772	2858.5	8.1764	4.8459	2858.4	8.1557	4.6346
200	2878.2	8.2625	5.4478	2878.1	8.2398	5.1879	2878.0	8.2182	4.9516	2877.9	8.1975	4.7358
210	2897.8	8.3034	5.5639	2897.7	8.2807	5.2985	2897.6	8.2591	5.0572	2897.5	8.2385	4.8368
220	2917.4	8.3435	5.6800	2917.3	8.3209	5.4090	2917.2	8.2993	5.1627	2917.2	8.2787	4.9378
230	2937.0	8.3830	5.7959	2937.0	8.3603	5.5195	2936.9	8.3388	5.2682	2936.8	8.3181	5.0387
240	2956.7	8.4217	5.9118	2956.7	8.3991	5.6299	2956.6	8.3775	5.3736	2956.5	8.3569	5.1396
250	2976.5	8.4598	6.0277	2976.4	8.4372	5.7403	2976.3	8.4156	5.4790	2976.3	8.3950	5.2404
260	2996.3	8.4973	6.1435	2996.2	8.4747	5.8506	2996.1	8.4531	5.5843	2996.1	8.4325	5.3412
270	3016.1	8.5341	6.2593	3016.0	8.5115	5.9609	3016.0	8.4900	5.6896	3015.9	8.4694	5.4419
280	3036.0	8.5704	6.3751	3035.9	8.5478	6.0712	3035.9	8.5263	5.7949	3035.8	8.5057	5.5426
290	3055.9	8.6061	6.4908	3055.9	8.5836	6.1814	3055.8	8.5620	5.9001	3055.8	8.5414	5.6433
300	3075.9	8.6413	6.6065	3075.9	8.6188	6.2916	3075.8	8.5972	6.0053	3075.8	8.5767	5.7439

TABLE 3 WATER AND STEAM

	p(MPa)	.040			.042			.044			.046	
SAT t(°C)		75.89			77.06			78.19			79.28	
SAT.LIQ	317.7	1.0261	.0010265	322.6	1.0402	.0010273	327.3	1.0537	.0010280	331.9	1.0667	.0010287
SAT.VAP	2636.9	7.6709	3.99342	2638.9	7.6542	3.81500	2640.7	7.6383	3.65232	2642.6	7.6232	3.50336
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3096.0	8.6760	6.7221	3095.9	8.6534	6.4018	3095.9	8.6319	6.1105	3095.8	8.6113	5.8445
320	3116.1	8.7102	6.8378	3116.0	8.6876	6.5119	3116.0	8.6661	6.2156	3115.9	8.6455	5.9451
330	3136.2	8.7439	6.9534	3136.2	8.7214	6.6220	3136.2	8.6998	6.3208	3136.1	8.6793	6.0457
340	3156.5	8.7772	7.0690	3156.4	8.7546	6.7322	3156.4	8.7331	6.4259	3156.3	8.7125	6.1463
350	3176.8	8.8100	7.1846	3176.7	8.7874	6.8423	3176.7	8.7659	6.5310	3176.6	8.7454	6.2469
360	3197.1	8.8424	7.3002	3197.1	8.8198	6.9524	3197.0	8.7983	6.6361	3197.0	8.7778	6.3474
370	3217.5	8.8744	7.4158	3217.5	8.8518	7.0625	3217.4	8.8303	6.7412	3217.4	8.8098	6.4479
380	3238.0	8.9060	7.5314	3238.0	8.8834	7.1725	3237.9	8.8619	6.8463	3237.9	8.8414	6.5484
390	3258.5	8.9372	7.6469	3258.5	8.9146	7.2826	3258.5	8.8931	6.9514	3258.4	8.8726	6.6489
400	3279.1	8.9680	7.7625	3279.1	8.9455	7.3926	3279.1	8.9240	7.0564	3279.0	8.9034	6.7494
410	3299.8	8.9985	7.8780	3299.8	8.9760	7.5027	3299.7	8.9545	7.1615	3299.7	8.9339	6.8499
420	3320.5	9.0286	7.9935	3320.5	9.0061	7.6127	3320.5	8.9846	7.2665	3320.4	8.9640	6.9504
430	3341.3	9.0584	8.1091	3341.3	9.0359	7.7227	3341.3	9.0144	7.3715	3341.2	8.9938	7.0509
440	3362.2	9.0879	8.2246	3362.2	9.0653	7.8328	3362.1	9.0438	7.4766	3362.1	9.0233	7.1513
450	3383.1	9.1170	8.3401	3383.1	9.0945	7.9428	3383.1	9.0730	7.5816	3383.0	9.0525	7.2518
460	3404.1	9.1459	8.4556	3404.1	9.1233	8.0528	3404.1	9.1018	7.6866	3404.1	9.0813	7.3523
470	3425.2	9.1744	8.5711	3425.2	9.1519	8.1628	3425.1	9.1304	7.7916	3425.1	9.1098	7.4527
480	3446.3	9.2027	8.6866	3446.3	9.1801	8.2728	3446.3	9.1586	7.8966	3446.3	9.1381	7.5532
490	3467.5	9.2306	8.8021	3467.5	9.2081	8.3828	3467.5	9.1866	8.0016	3467.5	9.1661	7.6536
500	3488.8	9.2583	8.9176	3488.8	9.2358	8.4928	3488.8	9.2143	8.1066	3488.7	9.1938	7.7540
510	3510.1	9.2857	9.0330	3510.1	9.2632	8.6028	3510.1	9.2417	8.2116	3510.1	9.2212	7.8545
520	3531.5	9.3129	9.1485	3531.5	9.2904	8.7127	3531.5	9.2689	8.3166	3531.5	9.2483	7.9549
530	3553.0	9.3398	9.2640	3553.0	9.3173	8.8227	3553.0	9.2958	8.4216	3553.0	9.2753	8.0553
540	3574.6	9.3665	9.3795	3574.5	9.3439	8.9327	3574.5	9.3225	8.5266	3574.5	9.3019	8.1557
550	3596.2	9.3929	9.4949	3596.2	9.3704	9.0427	3596.1	9.3489	8.6315	3596.1	9.3283	8.2561
560	3617.9	9.4191	9.6104	3617.8	9.3965	9.1526	3617.8	9.3751	8.7365	3617.8	9.3545	8.3566
570	3639.6	9.4450	9.7258	3639.6	9.4225	9.2626	3639.6	9.4010	8.8415	3639.6	9.3805	8.4570
580	3661.4	9.4708	9.8413	3661.4	9.4482	9.3726	3661.4	9.4267	8.9464	3661.4	9.4062	8.5574
590	3683.3	9.4963	9.9567	3683.3	9.4737	9.4825	3683.3	9.4522	9.0514	3683.3	9.4317	8.6578
600	3705.3	9.5216	10.072	3705.3	9.4990	9.5925	3705.2	9.4775	9.1564	3705.2	9.4570	8.7582

TABLE 3 WATER AND STEAM

p(MPa)	.040			.042			.044			.046		
SAT t(°C)	75.89			77.06			78.19			79.28		
SAT.LIQ	317.7	1.0261	.0010265	322.6	1.0402	.0010273	327.3	1.0537	.0010280	331.9	1.0667	.0010287
SAT.VAP	2636.9	7.6709	3.99342	2638.9	7.6542	3.81500	2640.7	7.6383	3.65232	2642.6	7.6232	3.50338
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg.K	v m³/kg
610	3727.3	9.5466	10.188	3727.3	9.5241	9.7024	3727.3	9.5026	9.2613	3727.3	9.4821	8.8586
620	3749.4	9.5715	10.303	3749.4	9.5490	9.8124	3749.4	9.5275	9.3663	3749.4	9.5070	8.9590
630	3771.6	9.5962	10.419	3771.6	9.5737	9.9223	3771.5	9.5522	9.4712	3771.5	9.5317	9.0594
640	3793.8	9.6207	10.534	3793.8	9.5981	10.032	3793.8	9.5767	9.5762	3793.8	9.5561	9.1598
650	3816.1	9.6450	10.649	3816.1	9.6224	10.142	3816.1	9.6010	9.6811	3816.1	9.5804	9.2601
660	3838.5	9.6691	10.765	3838.5	9.6465	10.252	3838.4	9.6251	9.7861	3838.4	9.6045	9.3605
670	3860.9	9.6930	10.880	3860.9	9.6704	10.362	3860.9	9.6490	9.8910	3860.9	9.6284	9.4609
680	3883.4	9.7167	10.996	3883.4	9.6942	10.472	3883.4	9.6727	9.9960	3883.4	9.65[illegible]	9.5613
690	3906.0	9.7403	11.111	3906.0	9.7177	10.582	3906.0	9.6963	10.101	3905.9	9.675[illegible]	9.6617
700	3928.6	9.7636	11.227	3928.6	9.7411	10.692	3928.6	9.7196	10.206	3928.6	9.6991	9.7621
710	3951.3	9.7869	11.342	3951.3	9.7643	10.802	3951.3	9.7429	10.311	3951.3	9.7223	9.8624
720	3974.1	9.8099	11.457	3974.1	9.7874	10.912	3974.1	9.7659	10.416	3974.1	9.7454	9.9628
730	3996.9	9.8328	11.573	3996.9	9.8103	11.022	3996.9	9.7888	10.521	3996.9	9.7682	10.063
740	4019.8	9.8555	11.688	4019.8	9.8330	11.132	4019.8	9.8115	10.626	4019.8	9.7910	10.164
750	4042.8	9.8780	11.804	4042.8	9.8555	11.242	4042.8	9.8340	10.731	4042.8	9.8135	10.264
760	4065.8	9.9004	11.919	4065.8	9.8779	11.351	4065.8	9.8564	10.835	4065.8	9.8359	10.364
770	4088.9	9.9227	12.035	4088.9	9.9002	11.461	4088.9	9.8787	10.940	4088.9	9.8582	10.465
780	4112.1	9.9448	12.150	4112.1	9.9223	11.571	4112.0	9.9008	11.045	4112.0	9.8803	10.565
790	4135.3	9.9667	12.265	4135.3	9.9442	11.681	4135.3	9.9227	11.150	4135.3	9.9022	10.665
800	4158.6	9.9885	12.381	4158.6	9.9660	11.791	4158.5	9.9445	11.255	4158.5	9.9240	10.766

TABLE 3 WATER AND STEAM

p(MPa) =	.040			.050			.055			.060		
SAT t(°C)	80.83			81.35			83.74			85.95		
SAT.LIQ	336.3	1.0792	.0010294	340.6	1.0912	.0010301	350.6	1.1194	.0010317	359.9	1.1454	.0010333
SAT.VAP	2644.3	7.6066	3.36649	2646.0	7.5947	3.24022	2649.9	7.5623	2.96359	2653.6	7.5327	2.73176
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	.0	-.0002	.0010002	.	-.0002	.0010002	.0	-.0001	.0010002	.0	-.0001	.0010002
10	42.0	.1510	.0010002	42.0	.1510	.0010002	42.0	.1510	.0010002	42.1	.1510	.0010002
20	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017
30	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043
40	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078
50	209.3	.7035	.0010121	209.3	.7035	.0010121	209.3	.7035	.0010121	209.3	.7035	.0010121
60	251.1	.8310	.0010171	251.1	.8310	.0010171	251.1	.8310	.0010171	251.1	.8310	.0010171
70	293.0	.9548	.0010228	293.0	.9548	.0010228	293.0	.9548	.0010228	293.0	.9548	.0010228
80	334.9	1.0753	.0010292	334.9	1.0753	.0010292	334.9	1.0752	.0010292	334.9	1.0752	.0010292
90	2663.3	7.6615	3.4626	2663.0	7.6421	3.3229	2662.3	7.5966	3.0181	2661.6	7.5549	2.7642
100	2682.8	7.7146	3.5616	2682.6	7.6953	3.4181	2681.9	7.6499	3.1049	2681.3	7.6085	2.8440
110	2702.3	7.7663	3.6602	2702.1	7.7470	3.5129	2701.5	7.7018	3.1913	2701.0	7.6605	2.9234
120	2721.8	7.8165	3.7586	2721.6	7.7972	3.6074	2721.1	7.7522	3.2774	2720.6	7.7111	3.0025
130	2741.3	7.8654	3.8566	2741.1	7.8462	3.7016	2740.7	7.8013	3.3633	2740.2	7.7603	3.0813
140	2760.8	7.9131	3.9544	2760.6	7.8940	3.7955	2760.2	7.8492	3.4488	2759.8	7.8083	3.1599
150	2780.3	7.9597	4.0521	2780.1	7.9406	3.8893	2779.7	7.8959	3.5342	2779.4	7.8551	3.2383
160	2799.7	8.0052	4.1495	2799.6	7.9861	3.9829	2799.3	7.9415	3.6194	2798.9	7.9008	3.3165
170	2819.2	8.0497	4.2468	2819.1	8.0307	4.0764	2818.8	7.9861	3.7045	2818.5	7.9454	3.3946
180	2838.7	8.0933	4.3440	2838.6	8.0742	4.1697	2838.3	8.0298	3.7894	2838.1	7.9891	3.4726
190	2858.3	8.1359	4.4410	2858.2	8.1169	4.2629	2857.9	8.0725	3.8743	2857.7	8.0319	3.5504
200	2877.8	8.1777	4.5380	2877.7	8.1587	4.3560	2877.5	8.1143	3.9590	2877.3	8.0738	3.6281
210	2897.4	8.2187	4.6349	2897.4	8.1997	4.4490	2897.1	8.1554	4.0436	2896.9	8.1149	3.7058
220	2917.1	8.2589	4.7317	2917.0	8.2399	4.5420	2916.8	8.1956	4.1282	2916.6	8.1552	3.7833
230	2936.7	8.2984	4.8284	2936.7	8.2794	4.6349	2936.5	8.2352	4.2127	2936.3	8.1947	3.8609
240	2956.5	8.3372	4.9251	2956.4	8.3182	4.7277	2956.2	8.2740	4.2971	2956.0	8.2336	3.9383
250	2976.2	8.3753	5.0217	2976.1	8.3564	4.8205	2976.0	8.3122	4.3815	2975.8	8.2718	4.0157
260	2996.0	8.4128	5.1183	2995.9	8.3939	4.9133	2995.8	8.3497	4.4659	2995.6	8.3093	4.0931
270	3015.9	8.4497	5.2149	3015.8	8.4308	5.0060	3015.7	8.3866	4.5502	3015.5	8.3462	4.1704
280	3035.8	8.4860	5.3114	3035.7	8.4671	5.0986	3035.6	8.4229	4.6345	3035.4	8.3826	4.2477
290	3055.7	8.5217	5.4079	3055.7	8.5028	5.1913	3055.5	8.4587	4.7187	3055.4	8.4184	4.3249
300	3075.7	8.5569	5.5043	3075.7	8.5380	5.2839	3075.6	8.4939	4.8030	3075.4	8.4536	4.4022

TABLE 3 WATER AND STEAM

p(MPa) =	.048			.050			.055			.060		
SAT t(°C)	80.33			81.35			83.74			85.95		
SAT.LIQ	336.3	1.0792	.0010294	340.6	1.0912	.0010301	350.6	1.1194	.0010317	359.9	1.1454	.0010333
SAT.VAP	2644.3	7.6086	3.36649	2646.0	7.5947	3.24022	2649.9	7.5623	2.96359	2653.6	7.5327	2.73176
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3095.8	8.5916	5.6008	3095.7	8.5728	5.3765	3095.6	8.5286	4.8872	3095.5	8.4883	4.4794
320	3115.9	8.6259	5.6972	3115.9	8.6070	5.4691	3115.7	8.5628	4.9714	3115.6	8.5226	4.5566
330	3136.1	8.6596	5.7936	3136.0	8.6407	5.5616	3135.9	8.5966	5.0555	3135.8	8.5563	4.6338
340	3156.3	8.6929	5.8900	3156.3	8.6740	5.6542	3156.2	8.6299	5.1397	3156.1	8.5896	4.7109
350	3176.6	8.7257	5.9864	3176.6	8.7068	5.7467	3176.5	8.6627	5.2238	3176.4	8.6224	4.7881
360	3197.0	8.7581	6.0827	3196.9	8.7392	5.8392	3196.8	8.6951	5.3079	3196.7	8.6549	4.8652
370	3217.4	8.7901	6.1791	3217.3	8.7712	5.9317	3217.3	8.7271	5.3920	3217.2	8.6869	4.9423
380	3237.9	8.8217	6.2754	3237.8	8.8028	6.0242	3237.7	8.7587	5.4761	3237.7	8.7185	5.0194
390	3258.4	8.8529	6.3717	3258.4	8.8340	6.1167	3258.3	8.7900	5.5602	3258.2	8.7497	5.0965
400	3279.0	8.8837	6.4680	3279.0	8.8649	6.2091	3278.9	8.8208	5.6443	3278.8	8.7806	5.1736
410	3299.7	8.9142	6.5643	3299.6	8.8954	6.3016	3299.6	8.8513	5.7284	3299.5	8.8111	5.2507
420	3320.4	8.9444	6.6606	3320.4	8.9255	6.3941	3320.3	8.8814	5.8124	3320.2	8.8412	5.3277
430	3341.2	8.9742	6.7569	3341.2	8.9553	6.4865	3341.1	8.9112	5.8965	3341.1	8.8710	5.4048
440	3362.1	9.0036	6.8532	3362.1	8.9848	6.5790	3362.0	8.9407	5.9805	3361.9	8.9005	5.4819
450	3383.0	9.0328	6.9495	3383.0	9.0139	6.6714	3382.9	8.9699	6.0646	3382.9	8.9296	5.5589
460	3404.0	9.0616	7.0458	3404.0	9.0428	6.7638	3403.9	8.9987	6.1486	3403.9	8.9585	5.6360
470	3425.1	9.0902	7.1420	3425.1	9.0713	6.8562	3425.0	9.0273	6.2327	3425.0	8.9871	5.7130
480	3446.2	9.1184	7.2383	3446.2	9.0996	6.9487	3446.2	9.0555	6.3167	3446.1	9.0153	5.7900
490	3467.4	9.1464	7.3346	3467.4	9.1275	7.0411	3467.4	9.0835	6.4007	3467.3	9.0433	5.8671
500	3488.7	9.1741	7.4308	3488.7	9.1552	7.1335	3488.6	9.1112	6.4847	3488.6	9.0710	5.9441
510	3510.1	9.2015	7.5271	3510.0	9.1827	7.2259	3510.0	9.1386	6.5687	3509.9	9.0984	6.0211
520	3531.5	9.2287	7.6233	3531.4	9.2098	7.3183	3531.4	9.1658	6.6527	3531.3	9.1256	6.0981
530	3552.9	9.2556	7.7196	3552.9	9.2367	7.4107	3552.9	9.1927	6.7367	3552.8	9.1525	6.1751
540	3574.5	9.2823	7.8158	3574.5	9.2634	7.5031	3574.4	9.2194	6.8208	3574.4	9.1792	6.2521
550	3596.1	9.3087	7.9120	3596.1	9.2898	7.5955	3596.0	9.2458	6.9047	3596.0	9.2056	6.3292
560	3617.8	9.3349	8.0083	3617.8	9.3160	7.6878	3617.7	9.2720	6.9887	3617.7	9.2318	6.4062
570	3639.5	9.3608	8.1045	3639.5	9.3420	7.7802	3639.5	9.2979	7.0727	3639.4	9.2577	6.4832
580	3661.4	9.3865	8.2007	3661.3	9.3677	7.8726	3661.3	9.3237	7.1567	3661.3	9.2835	6.5602
590	3683.3	9.4121	8.2969	3683.2	9.3932	7.9650	3683.2	9.3492	7.2407	3683.2	9.3090	6.6371
600	3705.2	9.4374	8.3932	3705.2	9.4185	8.0574	3705.2	9.3745	7.3247	3705.1	9.3343	6.7141

TABLE 3 WATER AND STEAM

p(MPa) =	.048			.050			055			.060		
SAT t(°C)	80.33			81.35			83.74			85.95		
SAT.LIQ	336.3	1.0792	.0010294	340.6	1.0912	.0010301	350.6	1.1194	.0010317	359.9	1.1454	.0010333
SAT.VAP	2644.3	7.6086	3.36649	2646.0	7.5947	3.24022	2649.9	7.5623	2.96359	2653.6	7.5327	2.73176
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3727.2	9.4624	8.4894	3727.2	9.4436	8.1497	3727.2	9.3996	7.4087	3727.1	9.3594	6.7911
620	3749.3	9.4873	8.5856	3749.3	9.4685	8.2421	3749.3	9.4244	7.4927	3749.2	9.3843	6.8681
630	3771.5	9.5120	8.6818	3771.5	9.4931	8.3345	3771.5	9.4491	7.5766	3771.4	9.4089	6.9451
640	3793.7	9.5365	8.7780	3793.7	9.5176	8.4268	3793.7	9.4736	7.6606	3793.7	9.4334	7.0221
650	3816.0	9.5608	8.8742	3816.0	9.5419	8.5192	3816.0	9.4979	7.7446	3816.0	9.4577	7.0991
660	3838.4	9.5849	8.9704	3838.4	9.5660	8.6116	3838.4	9.5220	7.8285	3838.3	9.4818	7.1760
670	3860.8	9.6088	9.0666	3860.8	9.5899	8.7039	3860.8	9.5459	7.9125	3860.8	9.5057	7.2530
680	3883.4	9.6325	9.1628	3883.3	9.6137	8.7963	3883.3	9.5697	7.9965	3883.3	9.5295	7.3300
690	3905.9	9.6561	9.2590	3905.9	9.6372	8.8886	3905.9	9.5932	8.0804	3905.8	9.5530	7.4069
700	3928.6	9.6795	9.3552	3928.6	9.6606	8.9810	3928.5	9.6166	8.1644	3928.5	9.5764	7.4839
710	3951.3	9.7027	9.4514	3951.3	9.6838	9.0733	3951.2	9.6398	8.2484	3951.2	9.5996	7.5609
720	3974.0	9.7257	9.5476	3974.0	9.7069	9.1657	3974.0	9.6629	8.3323	3974.0	9.6227	7.6378
730	3996.9	9.7486	9.6438	3996.9	9.7297	9.2580	3996.8	9.6857	8.4163	3996.8	9.6456	7.7148
740	4019.8	9.7713	9.7400	4019.8	9.7525	9.3504	4019.7	9.7085	8.5002	4019.7	9.6683	7.7918
750	4042.7	9.7939	9.8362	4042.7	9.7750	9.4427	4042.7	9.7310	8.5842	4042.7	9.6908	7.8687
760	4065.8	9.8163	9.9324	4065.8	9.7974	9.5351	4065.7	9.7534	8.6681	4065.7	9.7132	7.9457
770	4088.9	9.8385	10.029	4088.9	9.8197	9.6274	4088.8	9.7757	8.7521	4088.8	9.7355	8.0227
780	4112.0	9.8606	10.125	4112.0	9.8418	9.7197	4112.0	9.7978	8.8360	4112.0	9.7576	8.0996
790	4135.2	9.8826	10.221	4135.2	9.8637	9.8121	4135.2	9.8197	8.9200	4135.2	9.7795	8.1766
800	4158.5	9.9043	10.317	4158.5	9.8855	9.9044	4158.5	9.8415	9.0039	4158.5	9.8013	8.2535

TABLE 3 WATER AND STEAM

p(MPa) =	.065			.070			.075			.080		
SAT t(°C)	88.02			89.96			91.79			93.51		
SAT.LIQ	368.6	1.1696	.0010347	376.8	1.1921	.0010361	384.5	1.2131	.0010375	391.7	1.2330	.0010387
SAT.VAP	2656.9	7.5055	2.53457	2660.1	7.4804	2.36473	2663.0	7.4570	2.21688	2665.8	7.4352	2.08696
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	.0	.0001	.0010002	.0	-.0001	.0010002	.0	-.0001	.0010002	.0	-.0001	.0010002
10	42.1	.1510	.0010002	42.1	.1510	.0010002	42.1	.1510	.0010002	42.1	.1510	.0010002
20	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017
30	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043
40	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078
50	209.3	.7035	.0010121	209.3	.7035	.0010121	209.3	.7035	.0010121	209.3	.7035	.0010121
60	251.1	.8310	.0010171	251.1	.8310	.0010171	251.1	.8310	.0010171	251.1	.8310	.0010171
70	293.0	.9548	.0010228	293.0	.9548	.0010228	293.0	.9548	.0010228	293.0	.9548	.0010228
80	334.9	1.0752	.0010292	334.9	1.0752	.0010292	334.9	1.0752	.0010292	334.9	1.0752	.0010292
90	2660.9	7.5164	2.5492	2660.2	7.4806	2.3650	376.9	1.1925	.0010361	376.9	1.1925	.0010361
100	2680.7	7.5702	2.6231	2680.0	7.5346	2.4338	2679.4	7.5014	2.2698	2678.8	7.4703	2.1262
110	2700.4	7.6224	2.6966	2699.8	7.5870	2.5023	2699.3	7.5540	2.3339	2698.7	7.5230	2.1865
120	2720.1	7.6731	2.7698	2719.6	7.6379	2.5704	2719.1	7.6050	2.3976	2718.6	7.5742	2.2464
130	2739.7	7.7225	2.8428	2739.3	7.6874	2.6383	2738.8	7.6546	2.4611	2738.4	7.6239	2.3060
140	2759.4	7.7705	2.9155	2759.0	7.7356	2.7059	2758.5	7.7029	2.5243	2758.1	7.6723	2.3654
150	2779.0	7.8174	2.9879	2778.6	7.7825	2.7733	2778.2	7.7500	2.5873	2777.8	7.7195	2.4246
160	2798.6	7.8632	3.0603	2798.2	7.8284	2.8406	2797.9	7.7959	2.6502	2797.5	7.7655	2.4836
170	2818.2	7.9079	3.1324	2817.9	7.8732	2.9077	2817.6	7.8408	2.7129	2817.2	7.8105	2.5424
180	2837.8	7.9517	3.2044	2837.5	7.9170	2.9746	2837.2	7.8847	2.7754	2836.9	7.8544	2.6011
190	2857.4	7.9945	3.2764	2857.1	7.9599	3.0415	2856.9	7.9276	2.8379	2856.6	7.8974	2.6598
200	2877.0	8.0365	3.3482	2876.8	8.0019	3.1082	2876.6	7.9697	2.9002	2876.3	7.9395	2.7183
210	2896.7	8.0776	3.4199	2896.5	8.0430	3.1749	2896.3	8.0108	2.9625	2896.0	7.9807	2.7767
220	2916.4	8.1179	3.4916	2916.2	8.0834	3.2414	2916.0	8.0513	3.0247	2915.8	8.0212	2.8350
230	2936.1	8.1575	3.5631	2935.9	8.1230	3.3080	2935.7	8.0909	3.0868	2935.5	8.0608	2.8933
240	2955.9	8.1964	3.6347	2955.7	8.1619	3.3744	2955.5	8.1298	3.1489	2955.3	8.0998	2.9515
250	2975.7	8.2346	3.7062	2975.5	8.2002	3.4409	2975.3	8.1681	3.2109	2975.2	8.1381	3.0097
260	2995.5	8.2722	3.7776	2995.3	8.2377	3.5072	2995.2	8.2057	3.2729	2995.0	8.1757	3.0678
270	3015.4	8.3091	3.8490	3015.2	8.2747	3.5736	3015.1	8.2427	3.3348	3014.9	8.2127	3.1259
280	3035.3	8.3455	3.9204	3035.2	8.3111	3.6399	3035.0	8.2791	3.3967	3034.9	8.2491	3.1840
290	3055.3	8.3813	3.9917	3055.2	8.3469	3.7061	3055.0	8.3149	3.4586	3054.9	8.2849	3.2420
300	3075.3	8.4165	4.0631	3075.2	8.3822	3.7724	3075.1	8.3502	3.5205	3075.0	8.3202	3.3000

TABLE 3 WATER AND STEAM

p(MPa) =	.065			.070			.075			.080		
SAT. t(°C)	88.02			89.96			91.79			93.51		
SAT.LIQ	368.6	1.1696	.0010347	376.8	1.1921	.0010361	384.5	1.2131	.0010375	391.7	1.2330	.0010387
SAT.VAP	2656.9	7.5055	2.53457	2660.1	7.4804	2.36473	2663.0	7.4570	2.21688	2665.8	7.4352	2.08696
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3095.4	8.4512	4.1344	3095.3	8.4169	3.8386	3095.2	8.3849	3.5823	3095.1	8.3550	3.3580
320	3115.5	8.4855	4.2056	3115.4	8.4511	3.9048	3115.3	8.4192	3.6441	3115.2	8.3893	3.4160
330	3135.7	8.5192	4.2769	3135.6	8.4849	3.9710	3135.5	8.4530	3.7059	3135.4	8.4230	3.4739
340	3156.0	8.5525	4.3481	3155.9	8.5182	4.0372	3155.8	8.4863	3.7677	3155.7	8.4564	3.5319
350	3176.3	8.5854	4.4194	3176.2	8.5511	4.1033	3176.1	8.5191	3.8294	3176.0	8.4892	3.5898
360	3196.7	8.6178	4.4906	3196.6	8.5835	4.1695	3196.5	8.5516	3.8912	3196.4	8.5217	3.6477
370	3217.1	8.6498	4.5618	3217.0	8.6155	4.2356	3216.9	8.5836	3.9529	3216.8	8.5537	3.7056
380	3237.6	8.6815	4.6330	3237.5	8.6472	4.3017	3237.4	8.6152	4.0146	3237.3	8.5854	3.7634
390	3258.1	8.7127	4.7041	3258.1	8.6784	4.3678	3258.0	8.6465	4.0763	3257.9	8.6166	3.8213
400	3278.7	8.7435	4.7753	3278.7	8.7093	4.4339	3278.6	8.6773	4.1380	3278.5	8.6475	3.8792
410	3299.4	8.7740	4.8465	3299.4	8.7398	4.5000	3299.3	8.7078	4.1997	3299.2	8.6780	3.9370
420	3320.2	8.8042	4.9176	3320.1	8.7699	4.5661	3320.0	8.7380	4.2614	3320.0	8.7081	3.9948
430	3341.0	8.8340	4.9888	3340.9	8.7997	4.6322	3340.8	8.7678	4.3231	3340.8	8.7380	4.0527
440	3361.9	8.8635	5.0599	3361.8	8.8292	4.6982	3361.7	8.7973	4.3848	3361.7	8.7675	4.1105
450	3382.8	8.8926	5.1310	3382.7	8.8584	4.7643	3382.7	8.8265	4.4464	3382.6	8.7966	4.1683
460	3403.8	8.9215	5.2022	3403.8	8.8872	4.8304	3403.7	8.8553	4.5081	3403.6	8.8255	4.2261
470	3424.9	8.9501	5.2733	3424.8	8.9158	4.8964	3424.8	8.8839	4.5698	3424.7	8.8540	4.2840
480	3446.0	8.9783	5.3444	3446.0	8.9441	4.9624	3445.9	8.9122	4.6314	3445.9	8.8823	4.3418
490	3467.2	9.0063	5.4155	3467.2	8.9720	5.0285	3467.1	8.9401	4.6931	3467.1	8.9103	4.3996
500	3488.5	9.0340	5.4866	3488.5	8.9997	5.0945	3488.4	8.9678	4.7547	3488.4	8.9380	4.4574
510	3509.9	9.0614	5.5577	3509.8	9.0272	5.1606	3509.8	8.9953	4.8163	3509.7	8.9654	4.5151
520	3531.3	9.0886	5.6288	3531.2	9.0543	5.2266	3531.2	9.0225	4.8780	3531.1	8.9926	4.5729
530	3552.8	9.1155	5.6999	3552.7	9.0813	5.2926	3552.7	9.0494	4.9396	3552.6	9.0195	4.6307
540	3574.3	9.1422	5.7710	3574.3	9.1079	5.3586	3574.2	9.0761	5.0012	3574.2	9.0462	4.6885
550	3595.9	9.1686	5.8421	3595.9	9.1344	5.4247	3595.8	9.1025	5.0628	3595.8	9.0727	4.7463
560	3617.6	9.1948	5.9132	3617.6	9.1606	5.4907	3617.5	9.1287	5.1245	3617.5	9.0988	4.8040
570	3639.4	9.2208	5.9843	3639.3	9.1865	5.5567	3639.3	9.1546	5.1861	3639.3	9.1248	4.8618
580	3661.2	9.2465	6.0554	3661.2	9.2123	5.6227	3661.1	9.1804	5.2477	3661.1	9.1506	4.9196
590	3683.1	9.2720	6.1264	3683.1	9.2378	5.6887	3683.0	9.2059	5.3093	3683.0	9.1761	4.9773
600	3705.1	9.2973	6.1975	3705.0	9.2631	5.7547	3705.0	9.2312	5.3709	3705.0	9.2014	5.0351

TABLE 3 WATER AND STEAM

p(MPa) =	.065			.070			.075			.080		
S_AT t(°C)	88.02			89.96			91.79			93.51		
SAT.LIQ	368.6	1.1696	.0010347	376.8	1.1921	.0010361	384.5	1.2131	.0010375	391.7	1.2330	.0010387
SAT.VAP	2656.9	7.5055	2.53457	2660.1	7.4804	2.36473	2663.0	7.4570	2.21688	2665.8	7.4352	2.08696
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3727.1	9.3224	6.2686	3727.1	9.2882	5.8207	3727.0	9.2563	5.4325	3727.0	9.2265	5.0929
620	3749.2	9.3473	6.3397	3749.2	9.3130	5.8867	3749.1	9.2812	5.4941	3749.1	9.2514	5.1506
630	3771.4	9.3720	6.4107	3771.3	9.3377	5.9527	3771.3	9.3059	5.5557	3771.3	9.2760	5.2084
640	3793.6	9.3965	6.4818	3793.6	9.3622	6.0187	3793.5	9.3303	5.6173	3793.5	9.3005	5.2661
650	3815.9	9.4207	6.5528	3815.9	9.3865	6.0847	3815.9	9.3546	5.6789	3815.8	9.3248	5.3239
660	3838.3	9.4449	6.6239	3838.3	9.4106	6.1507	3838.2	9.3788	5.7405	3838.2	9.3489	5.3816
670	3860.7	9.4688	6.6950	3860.7	9.4345	6.2166	3860.7	9.4027	5.8021	3860.6	9.3729	5.4394
680	3883.2	9.4925	6.7660	3883.2	9.4583	6.2826	3883.2	9.4264	5.8637	3883.1	9.3966	5.4971
690	3905.8	9.5161	6.8371	3905.8	9.4818	6.3486	3905.8	9.4500	5.9253	3905.7	9.4202	5.5549
700	3928.5	9.5395	6.9081	3928.4	9.5052	6.4146	3928.4	9.4734	5.9869	3928.4	9.4436	5.6126
710	3951.2	9.5627	6.9792	3951.1	9.5284	6.4806	3951.1	9.4966	6.0484	3951.1	9.4668	5.6703
720	3973.9	9.5857	7.0502	3973.9	9.5515	6.5465	3973.9	9.5196	6.1100	3973.9	9.4898	5.7281
730	3996.8	9.6086	7.1213	3996.7	9.5744	6.6125	3996.7	9.5425	6.1716	3996.7	9.5127	5.7858
740	4019.7	9.6313	7.1923	4019.7	9.5971	6.6785	4019.6	9.5652	6.2332	4019.6	9.5354	5.8435
750	4042.6	9.6539	7.2634	4042.6	9.6197	6.7445	4042.6	9.5878	6.2948	4042.6	9.5580	5.9013
760	4065.7	9.6763	7.3344	4065.7	9.6421	6.8104	4065.6	9.6102	6.3563	4065.6	9.5804	5.9590
770	4088.8	9.6985	7.4054	4088.8	9.6643	6.8764	4088.7	9.6324	6.4179	4088.7	9.6026	6.0167
780	4111.9	9.7206	7.4765	4111.9	9.6864	6.9424	4111.9	9.6545	6.4795	4111.9	9.6247	6.0744
790	4135.2	9.7426	7.5475	4135.1	9.7083	7.0083	4135.1	9.6765	6.5410	4135.1	9.6467	6.1322
800	4158.4	9.7644	7.6186	4158.4	9.7301	7.0743	4158.4	9.6983	6.6026	4158.4	9.6685	6.1899

TABLE 3 WATER AND STEAM

p(MPa)	.095			.099			.095			.10		
SAT t(°C)	95.15			96.71			98.20			99.63		
SAT.LIQ	398.6	1.2516	.0010400	405.2	1.2696	.0010412	411.5	1.2865	.0010423	417.5	1.3027	.0010434
SAT.VAP	2668.4	7.4147	1.97187	2670.9	7.3954	1.86919	2673.2	7.3771	1.77699	2675.4	7.3598	1.69373
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	.0	-.0001	.0010002	.0	-.0001	.0010002	.1	-.0001	.0010002	.1	-.0001	.0010002
10	42.1	.1510	.0010002	42.1	.1510	.0010002	42.1	.1510	.0010002	42.1	.1510	.0010002
20	83.9	.2963	.0010017	83.9	.2963	.0010017	83.9	.2963	.0010017	84.0	.2963	.0010017
30	125.7	.4365	.0010043	125.7	.4365	.0010043	125.7	.4365	.0010043	125.8	.4365	.0010043
40	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078	167.5	.5721	.0010078
50	209.3	.7035	.0010121	209.3	.7035	.0010121	209.3	.7035	.0010121	209.3	.7035	.0010121
60	251.1	.8310	.0010171	251.1	.8309	.0010171	251.2	.8309	.0010171	251.2	.8309	.0010171
70	293.0	.9548	.0010228	293.0	.9548	.0010228	293.0	.9548	.0010228	293.0	.9548	.0010228
80	334.9	1.0752	.0010292	335.0	1.0752	.0010292	335.0	1.0752	.0010292	335.0	1.0752	.0010292
90	377.0	1.1925	.0010361	377.0	1.1925	.0010361	377.0	1.1925	.0010361	377.0	1.1925	.0010361
100	2678.1	7.4409	1.9996	2677.5	7.4132	1.8870	2676.8	7.3869	1.7862	2676.2	7.3618	1.6955
110	2698.1	7.4938	2.0564	2697.5	7.4663	1.9408	2697.0	7.4401	1.8374	2696.4	7.4152	1.7443
120	2718.0	7.5452	2.1129	2717.5	7.5177	1.9943	2717.0	7.4917	1.8882	2716.5	7.4670	1.7927
130	2737.9	7.5950	2.1692	2737.4	7.5677	2.0475	2737.0	7.5419	1.9387	2736.5	7.5173	1.8408
140	2757.7	7.6436	2.2252	2757.3	7.6164	2.1005	2756.9	7.5906	1.9890	2756.4	7.5662	1.8886
150	2777.5	7.6908	2.2810	2777.1	7.6638	2.1533	2776.7	7.6381	2.0391	2776.3	7.6137	1.9363
160	2797.2	7.7369	2.3366	2796.9	7.7099	2.2059	2796.5	7.6844	2.0890	2796.2	7.6601	1.9838
170	2816.9	7.7820	2.3920	2816.6	7.7550	2.2584	2816.3	7.7295	2.1387	2816.0	7.7053	2.0311
180	2836.6	7.8259	2.4474	2836.4	7.7991	2.3107	2836.1	7.7736	2.1884	2835.8	7.7495	2.0783
190	2856.4	7.8690	2.5026	2856.1	7.8422	2.3629	2855.8	7.8168	2.2379	2855.6	7.7927	2.1254
200	2876.1	7.9111	2.5577	2875.8	7.8843	2.4150	2875.6	7.8590	2.2873	2875.4	7.8349	2.1723
210	2895.8	7.9524	2.6127	2895.6	7.9257	2.4670	2895.4	7.9004	2.3366	2895.2	7.8763	2.2192
220	2915.6	7.9929	2.6677	2915.4	7.9662	2.5189	2915.2	7.9409	2.3858	2915.0	7.9169	2.2660
230	2935.4	8.0326	2.7226	2935.2	8.0059	2.5708	2935.0	7.9807	2.4350	2934.8	7.9567	2.3128
240	2955.2	8.0716	2.7774	2955.0	8.0449	2.6226	2954.8	8.0197	2.4841	2954.6	7.9958	2.3595
250	2975.0	8.1099	2.8322	2974.8	8.0832	2.6744	2974.7	8.0581	2.5332	2974.5	8.0342	2.4061
260	2994.9	8.1475	2.8869	2994.7	8.1209	2.7261	2994.6	8.0957	2.5822	2994.4	8.0719	2.4527
270	3014.8	8.1845	2.9416	3014.7	8.1579	2.7778	3014.5	8.1328	2.6312	3014.4	8.1089	2.4993
280	3034.8	8.2209	2.9963	3034.6	8.1944	2.8294	3034.5	8.1692	2.6801	3034.4	8.1454	2.5458
290	3054.8	8.2568	3.0509	3054.6	8.2302	2.8811	3054.5	8.2051	2.7291	3054.4	8.1813	2.5923
300	3074.8	8.2921	3.1055	3074.7	8.2656	2.9327	3074.6	8.2405	2.7780	3074.5	8.2166	2.6387

TABLE 3 WATER AND STEAM

	P=	.085			.090			.095			.100	
SAT t(°C)		95.15			96.71			98.20			99.63	
SAT.LIQ	398.6	1.2518	.0010400	405.2	1.2696	.0010412	411.5	1.2865	.0010423	417.5	1.3027	.0010434
SAT.VAP	2668.4	7.4147	1.97187	2670.9	7.3954	1.86919	2673.2	7.3771	1.77699	2675.4	7.3598	1.69373
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3094.9	8.3269	3.1601	3094.8	8.3003	2.9842	3094.7	8.2753	2.8268	3094.6	8.2514	2.6852
320	3115.1	8.3611	3.2147	3115.0	8.3346	3.0358	3114.9	8.3096	2.8757	3114.8	8.2857	2.7316
330	3135.3	8.3949	3.2693	3135.2	8.3684	3.0873	3135.1	8.3434	2.9245	3135.0	8.3196	2.7780
340	3155.6	8.4283	3.3238	3155.5	8.4018	3.1388	3155.4	8.3767	2.9734	3155.3	8.3529	2.8244
350	3175.9	8.4612	3.3783	3175.8	8.4347	3.1903	3175.7	8.4096	3.0222	3175.6	8.3858	2.8708
360	3196.3	8.4936	3.4328	3196.2	8.4671	3.2418	3196.1	8.4421	3.0709	3196.0	8.4183	2.9172
370	3216.7	8.5256	3.4873	3216.7	8.4992	3.2933	3216.6	8.4741	3.1197	3216.5	8.4504	2.9635
380	3237.2	8.5573	3.5418	3237.2	8.5308	3.3448	3237.1	8.5058	3.1685	3237.0	8.4820	3.0098
390	3257.8	8.5885	3.5963	3257.7	8.5621	3.3962	3257.7	8.5370	3.2173	3257.6	8.5133	3.0562
400	3278.4	8.6194	3.6507	3278.4	8.5929	3.4477	3278.3	8.5679	3.2660	3278.2	8.5442	3.1025
410	3299.1	8.6499	3.7052	3299.1	8.6235	3.4991	3299.0	8.5984	3.3147	3298.9	8.5747	3.1488
420	3319.9	8.6801	3.7596	3319.8	8.6536	3.5505	3319.8	8.6286	3.3635	3319.7	8.6049	3.1951
430	3340.7	8.7099	3.8141	3340.6	8.6835	3.6020	3340.6	8.6584	3.4122	3340.5	8.6347	3.2414
440	3361.6	8.7394	3.8685	3361.5	8.7130	3.6534	3361.5	8.6879	3.4609	3361.4	8.6642	3.2877
450	3382.6	8.7686	3.9229	3382.5	8.7421	3.7048	3382.4	8.7171	3.5096	3382.4	8.6934	3.3340
460	3403.6	8.7974	3.9774	3403.5	8.7710	3.7562	3403.4	8.7460	3.5583	3403.4	8.7223	3.3803
470	3424.7	8.8260	4.0318	3424.6	8.7996	3.8076	3424.5	8.7746	3.6070	3424.5	8.7508	3.4265
480	3445.8	8.8543	4.0862	3445.7	8.8278	3.8590	3445.7	8.8028	3.6557	3445.6	8.7791	3.4728
490	3467.0	8.8823	4.1406	3467.0	8.8558	3.9104	3466.9	8.8308	3.7044	3466.9	8.8071	3.5191
500	3488.3	8.9100	4.1950	3488.3	8.8835	3.9618	3488.2	8.8585	3.7531	3488.1	8.8348	3.5653
510	3509.7	8.9374	4.2494	3509.6	8.9110	4.0132	3509.6	8.8860	3.8018	3509.5	8.8623	3.6116
520	3531.1	8.9646	4.3038	3531.0	8.9382	4.0645	3531.0	8.9132	3.8505	3530.9	8.8894	3.6578
530	3552.6	8.9915	4.3582	3552.5	8.9651	4.1159	3552.5	8.9401	3.8991	3552.4	8.9164	3.7041
540	3574.1	9.0182	4.4126	3574.1	8.9918	4.1673	3574.0	8.9668	3.9478	3574.0	8.9431	3.7503
550	3595.8	9.0446	4.4669	3595.7	9.0182	4.2186	3595.7	8.9932	3.9965	3595.6	8.9695	3.7965
560	3617.4	9.0708	4.5213	3617.4	9.0444	4.2700	3617.4	9.0194	4.0451	3617.3	8.9957	3.8428
570	3639.2	9.0968	4.5757	3639.2	9.0704	4.3214	3639.1	9.0454	4.0938	3639.1	9.0217	3.8890
580	3661.0	9.1225	4.6301	3661.0	9.0961	4.3727	3661.0	9.0711	4.1425	3660.9	9.0474	3.9352
590	3682.9	9.1481	4.6844	3682.9	9.1216	4.4241	3682.9	9.0966	4.1911	3682.8	9.0729	3.9815
600	3704.9	9.1734	4.7388	3704.9	9.1469	4.4754	3704.8	9.1220	4.2398	3704.8	9.0982	4.0277

TABLE 3 WATER AND STEAM

p(MPa)	.085			.090			.095			.100		
SAT t(°C)	95.15			96.71			98.20			99.63		
SAT.LIQ	398.6	1.2516	.0010400	405.2	1.2696	.0010412	411.5	1.2865	.0010423	417.5	1.3027	.0010434
SAT.VAP	2665.4	7.4147	1.97187	2670.9	7.3954	1.86919	2673.2	7.3771	1.77699	2675.4	7.3598	1.69373
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3727.0	9.1985	4.7932	3726.9	9.1726	4.5268	3726.9	9.1471	4.2884	3726.8	9.1233	4.0739
620	3749.1	9.2233	4.8475	3749.0	9.1969	4.5781	3749.0	9.1719	4.3371	3748.9	9.1482	4.1201
630	3771.2	9.2480	4.9019	3771.2	9.2216	4.6295	3771.2	9.1966	4.3857	3771.1	9.1729	4.1663
640	3793.5	9.2725	4.9563	3793.4	9.2461	4.6808	3793.4	9.2211	4.4344	3793.4	9.1974	4.2126
650	3815.8	9.2968	5.0106	3815.7	9.2704	4.7321	3815.7	9.2454	4.4830	3815.7	9.2217	4.2588
660	3838.2	9.3209	5.0650	3838.1	9.2945	4.7835	3838.1	9.2695	4.5316	3838.1	9.2458	4.3050
670	3860.6	9.3449	5.1193	3860.6	9.3184	4.8348	3860.5	9.2935	4.5803	3860.5	9.2698	4.3512
680	3883.1	9.3686	5.1737	3883.1	9.3422	4.8862	3883.0	9.3172	4.6289	3883.0	9.2935	4.3974
690	3905.7	9.3922	5.2280	3905.7	9.3658	4.9375	3905.6	9.3408	4.6775	3905.6	9.3171	4.4436
700	3928.3	9.4156	5.2824	3928.3	9.3891	4.9888	3928.3	9.3642	4.7262	3928.2	9.3405	4.4898
710	3951.0	9.4388	5.3367	3951.0	9.4124	5.0401	3951.0	9.3874	4.7748	3951.0	9.3637	4.5360
720	3973.8	9.4618	5.3910	3973.8	9.4354	5.0915	3973.8	9.4104	4.8234	3973.7	9.3867	4.5822
730	3996.7	9.4847	5.4454	3996.6	9.4583	5.1428	3996.6	9.4333	4.8721	3996.6	9.4096	4.6284
740	4019.6	9.5074	5.4997	4019.5	9.4810	5.1941	4019.5	9.4561	4.9207	4019.5	9.4324	4.6746
750	4042.5	9.5300	5.5541	4042.5	9.5036	5.2454	4042.5	9.4786	4.9693	4042.5	9.4549	4.7208
760	4065.6	9.5524	5.6084	4065.6	9.5260	5.2968	4065.5	9.5010	5.0179	4065.5	9.4773	4.7670
770	4088.7	9.5746	5.6627	4088.7	9.5482	5.3481	4088.6	9.5233	5.0665	4088.6	9.4996	4.8132
780	4111.8	9.5967	5.7171	4111.8	9.5703	5.3994	4111.8	9.5454	5.1152	4111.8	9.5217	4.8593
790	4135.1	9.6187	5.7714	4135.0	9.5923	5.4507	4135.0	9.5673	5.1638	4135.0	9.5436	4.9055
800	4158.3	9.6405	5.8257	4158.3	9.6141	5.5020	4158.3	9.5891	5.2124	4158.3	9.5654	4.9517

TABLE 3 WATER AND STEAM

p(MPa)	.110			.120			.130			.140		
SAT t(°C)	102.32			104.81			107.13			109.32		
SAT.LIQ	428.8	1.3330	.0010455	439.4	1.3609	.0010476	449.2	1.3868	.0010495	458.4	1.4109	.0010513
SAT.VAP	2679.6	7.3277	1.54924	2683.4	7.2984	1.42813	2687.0	7.2715	1.32509	2690.3	7.2465	1.23633
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
	.1	-.0001	.0010002	.1	-.0001	.0010002	.1	-.0001	.0010002	.1	-.0001	.0010002
10	42.1	.1510	.0010002	42.1	.1510	.0010002	42.1	.1510	.0010002	42.1	.1510	.0010002
20	84.0	.2963	.0010017	84.0	.2963	.0010017	84.0	.2963	.0010017	84.0	.2963	.0010017
30	125.8	.4365	.0010043	125.8	.4365	.0010043	125.8	.4365	.0010043	125.8	.4365	.0010042
40	167.5	.5721	.0010078	167.6	.5721	.0010078	167.6	.5721	.0010078	167.6	.5721	.0010078
50	209.3	.7035	.0010121	209.3	.7035	.0010121	209.4	.7035	.0010121	209.4	.7035	.0010121
60	251.2	.8309	.0010171	251.2	.8309	.0010171	251.2	.8309	.0010171	251.2	.8309	.0010171
70	293.0	.9548	.0010228	293.0	.9548	.0010228	293.1	.9548	.0010228	293.1	.9548	.0010228
80	335.0	1.0752	.0010292	335.0	1.0752	.0010292	335.0	1.0752	.0010292	335.0	1.0752	.0010291
90	377.0	1.1925	.0010361	377.0	1.1925	.0010361	377.0	1.1925	.0010361	377.0	1.1925	.0010361
100	419.1	1.3069	.0010437	419.1	1.3069	.0010437	419.1	1.3068	.0010437	419.1	1.3068	.0010437
110	2695.2	7.3689	1.5834	2694.1	7.3263	1.4494	2692.9	7.2869	1.3360	2691.7	7.2502	1.2388
120	2715.4	7.4209	1.6276	2714.4	7.3787	1.4901	2713.3	7.3396	1.3738	2712.3	7.3033	1.2740
130	2735.6	7.4715	1.6716	2734.6	7.4295	1.5306	2733.7	7.3907	1.4113	2732.7	7.3546	1.3090
140	2755.6	7.5206	1.7153	2754.7	7.4788	1.5708	2753.9	7.4402	1.4485	2753.0	7.4044	1.3437
150	2775.6	7.5683	1.7587	2774.8	7.5267	1.6107	2774.0	7.4884	1.4855	2773.2	7.4527	1.3782
160	2795.5	7.6148	1.8020	2794.8	7.5734	1.6505	2794.1	7.5352	1.5224	2793.4	7.4998	1.4125
170	2815.4	7.6602	1.8451	2814.7	7.6189	1.6902	2814.1	7.5809	1.5591	2813.4	7.5456	1.4467
180	2835.2	7.7045	1.8881	2834.6	7.6634	1.7297	2834.1	7.6254	1.5956	2833.5	7.5903	1.4807
190	2855.0	7.7478	1.9310	2854.5	7.7068	1.7691	2854.0	7.6690	1.6320	2853.5	7.6339	1.5146
200	2874.9	7.7902	1.9738	2874.4	7.7492	1.8084	2873.9	7.7115	1.6684	2873.4	7.6765	1.5484
210	2894.7	7.8317	2.0165	2894.3	7.7908	1.8476	2893.8	7.7532	1.7046	2893.4	7.7183	1.5821
220	2914.5	7.8723	2.0591	2914.1	7.8315	1.8867	2913.7	7.7939	1.7408	2913.3	7.7591	1.6157
230	2934.4	7.9122	2.1017	2934.0	7.8714	1.9257	2933.6	7.8339	1.7769	2933.3	7.7992	1.6493
240	2954.3	7.9513	2.1442	2953.9	7.9106	1.9647	2953.6	7.8732	1.8129	2953.2	7.8384	1.6828
250	2974.2	7.9897	2.1866	2973.9	7.9491	2.0037	2973.5	7.9117	1.8489	2973.2	7.8770	1.7163
260	2994.1	8.0274	2.2290	2993.8	7.9869	2.0426	2993.5	7.9495	1.8849	2993.2	7.9149	1.7497
270	3014.1	8.0645	2.2714	3013.8	8.0240	2.0815	3013.5	7.9867	1.9208	3013.2	7.9521	1.7831
280	3034.1	8.1010	2.3137	3033.8	8.0605	2.1203	3033.6	8.0232	1.9567	3033.3	7.9887	1.8164
290	3054.1	8.1370	2.3560	3053.9	8.0965	2.1591	3053.6	8.0592	1.9925	3053.4	8.0247	1.8497
300	3074.2	8.1723	2.3983	3074.0	8.1319	2.1979	3073.8	8.0946	2.0283	3073.5	8.0601	1.8830

TABLE 3 WATER AND STEAM

p(MPa) =	.110			.120			.130			.140		
SAT t(°C)	102.32			104.81			107.13			109.32		
SAT.LIQ	428.8	1.3330	.0010455	439.4	1.3609	.0010476	449.2	1.3863	.0010495	458.4	1.4109	.0010513
SAT.VAP	2679.6	7.3277	1.54924	2683.4	7.2984	1.42813	2687.0	7.2715	1.32509	2690.3	7.2465	1.23633
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3094.4	8.2072	2.4405	3094.1	8.1667	2.2366	3093.9	8.1295	2.0641	3093.7	8.0950	1.9163
320	3114.6	8.2415	2.4828	3114.3	8.2011	2.2754	3114.1	8.1639	2.0999	3113.9	8.1294	1.9495
330	3134.8	8.2753	2.5250	3134.6	8.2349	2.3141	3134.4	8.1977	2.1357	3134.2	8.1633	1.9827
340	3155.1	8.3087	2.5672	3154.9	8.2683	2.3528	3154.7	8.2311	2.1714	3154.5	8.1967	2.0159
350	3175.4	8.3416	2.6093	3175.3	8.3012	2.3915	3175.1	8.2641	2.2071	3174.9	8.2297	2.0491
360	3195.9	8.3741	2.6515	3195.7	8.3337	2.4301	3195.5	8.2966	2.2428	3195.3	8.2622	2.0823
370	3216.3	8.4062	2.6937	3216.1	8.3658	2.4688	3216.0	8.3287	2.2785	3215.8	8.2943	2.1154
380	3236.8	8.4378	2.7358	3236.7	8.3975	2.5075	3236.5	8.3604	2.3142	3236.3	8.3260	2.1486
390	3257.4	8.4691	2.7779	3257.3	8.4288	2.5461	3257.1	8.3917	2.3499	3256.9	8.3573	2.1817
400	3278.1	8.5000	2.8201	3277.9	8.4597	2.5847	3277.8	8.4226	2.3856	3277.6	8.3882	2.2149
410	3298.8	8.5305	2.8622	3298.6	8.4902	2.6233	3298.5	8.4531	2.4212	3298.3	8.4188	2.2480
420	3319.5	8.5607	2.9043	3319.4	8.5204	2.6619	3319.3	8.4833	2.4569	3319.1	8.4490	2.2811
430	3340.4	8.5906	2.9464	3340.2	8.5503	2.7006	3340.1	8.5132	2.4925	3340.0	8.4788	2.3142
440	3361.3	8.6201	2.9885	3361.1	8.5798	2.7391	3361.0	8.5427	2.5282	3360.9	8.5084	2.3473
450	3382.2	8.6493	3.0306	3382.1	8.6090	2.7777	3382.0	8.5719	2.5638	3381.8	8.5376	2.3804
460	3403.3	8.6781	3.0727	3403.1	8.6379	2.8163	3403.0	8.6008	2.5994	3402.9	8.5665	2.4135
470	3424.4	8.7067	3.1147	3424.2	8.6664	2.8549	3424.1	8.6294	2.6351	3424.0	8.5951	2.4466
480	3445.5	8.7350	3.1568	3445.4	8.6947	2.8935	3445.3	8.6577	2.6707	3445.2	8.6234	2.4797
490	3466.7	8.7630	3.1989	3466.6	8.7227	2.9321	3466.5	8.6857	2.7063	3466.4	8.6514	2.5128
500	3488.0	8.7907	3.2409	3487.9	8.7505	2.9706	3487.8	8.7134	2.7419	3487.7	8.6791	2.5458
510	3509.4	8.8182	3.2830	3509.3	8.7779	3.0092	3509.2	8.7409	2.7775	3509.1	8.7066	2.5789
520	3530.8	8.8454	3.3250	3530.7	8.8051	3.0477	3530.6	8.7681	2.8131	3530.5	8.7338	2.6120
530	3552.3	8.8723	3.3671	3552.2	8.8321	3.0863	3552.1	8.7950	2.8487	3552.0	8.7607	2.6450
540	3573.9	8.8990	3.4091	3573.8	8.8587	3.1248	3573.7	8.8217	2.8843	3573.6	8.7874	2.6781
550	3595.5	8.9254	3.4512	3595.4	8.8852	3.1634	3595.3	8.8482	2.9199	3595.2	8.8139	2.7111
560	3617.2	8.9516	3.4932	3617.1	8.9114	3.2019	3617.0	8.8744	2.9555	3616.9	8.8401	2.7442
570	3639.0	8.9776	3.5353	3638.9	8.9374	3.2405	3638.8	8.9003	2.9910	3638.7	8.8661	2.7772
580	3660.8	9.0034	3.5773	3660.7	8.9631	3.2790	3660.7	8.9261	3.0266	3660.6	8.8918	2.8103
590	3682.7	9.0289	3.6193	3682.6	8.9886	3.3175	3682.6	8.9516	3.0622	3682.5	8.9174	2.8433
600	3704.7	9.0542	3.6614	3704.6	9.0140	3.3561	3704.5	8.9770	3.0978	3704.5	8.9427	2.8764

TABLE 3 WATER AND STEAM

p(MPa) =	.110			.120			= .130			= .140		
SAT t(°C)	102.32			104.81			107.13			109.32		
SAT.LIQ	428.8	1.3330	.0010455	439.4	1.3609	.0010476	449.2	1.3868	.0010495	458.4	1.4109	.0010513
SAT.VAP	2679.6	7.3277	1.54924	2683.4	7.2984	1.42813	2687.0	7.2715	1.32509	2690.3	7.2465	1.23633
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3726.8	9.0793	3.7034	3726.7	9.0391	3.3946	3726.6	9.0021	3.1333	3726.5	8.9678	2.9094
620	3748.9	9.1042	3.7454	3748.8	9.0640	3.4331	3748.7	9.0270	3.1689	3748.6	8.9927	2.9424
630	3771.0	9.1289	3.7874	3771.0	9.0887	3.4717	3770.9	9.0517	3.2045	3770.8	9.0174	2.9754
640	3793.3	9.1534	3.8294	3793.2	9.1132	3.5102	3793.1	9.0762	3.2400	3793.1	9.0419	3.0085
650	3815.6	9.1777	3.8715	3815.5	9.1375	3.5487	3815.5	9.1005	3.2756	3815.4	9.0662	3.0415
660	3838.0	9.2018	3.9135	3837.9	9.1616	3.5872	3837.8	9.1246	3.3112	3837.8	9.0903	3.0745
670	3860.4	9.2257	3.9555	3860.4	9.1855	3.6257	3860.3	9.1485	3.3467	3860.2	9.1143	3.1075
680	3882.9	9.2495	3.9975	3882.9	9.2093	3.6642	3882.8	9.1723	3.3823	3882.8	9.1380	3.1406
690	3905.5	9.2730	4.0395	3905.5	9.2328	3.7028	3905.4	9.1958	3.4178	3905.3	9.1616	3.1736
700	3928.2	9.2964	4.0815	3928.1	9.2562	3.7413	3928.1	9.2192	3.4534	3928.0	9.1850	3.2066
710	3950.9	9.3197	4.1235	3950.8	9.2795	3.7798	3950.8	9.2425	3.4889	3950.7	9.2082	3.2396
720	3973.7	9.3427	4.1655	3973.6	9.3025	3.8183	3973.6	9.2655	3.5245	3973.5	9.2313	3.2726
730	3996.5	9.3656	4.2075	3996.5	9.3254	3.8568	3996.4	9.2884	3.5600	3996.3	9.2542	3.3056
740	4019.4	9.3883	4.2495	4019.4	9.3481	3.8953	4019.3	9.3111	3.5956	4019.3	9.2769	3.3386
750	4042.4	9.4109	4.2915	4042.4	9.3707	3.9338	4042.3	9.3337	3.6311	4042.2	9.2995	3.3716
760	4065.4	9.4333	4.3335	4065.4	9.3931	3.9723	4065.3	9.3561	3.6666	4065.3	9.3219	3.4047
770	4088.5	9.4556	4.3755	4088.5	9.4154	4.0108	4088.4	9.3784	3.7022	4088.4	9.3441	3.4377
780	4111.7	9.4777	4.4175	4111.7	9.4375	4.0493	4111.6	9.4005	3.7377	4111.6	9.3662	3.4707
790	4134.9	9.4996	4.4595	4134.9	9.4594	4.0878	4134.8	9.4224	3.7733	4134.8	9.3882	3.5037
800	4158.2	9.5214	4.5015	4158.2	9.4812	4.1263	4158.1	9.4442	3.8088	4158.1	9.4100	3.5367

TABLE 3 WATER AND STEAM

p(MPa) =	.150			.160			.170			.180		
SAT t(°C)	111.37			113.32			115.17			116.93		
SAT.LIQ	467.1	1.4336	.0010530	475.4	1.4550	.0010547	483.2	1.4752	.0010563	490.7	1.4944	.0010579
SAT.VAP	2693.4	7.2234	1.15904	2696.2	7.2017	1.09111	2699.0	7.1813	1.03093	2701.5	7.1622	.97723
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	.1	-.0001	.0010001	.1	-.0001	.0010001	.1	-.0001	.0010001	.1	-.0001	.0010001
10	42.1	.1510	.0010002	42.1	.1510	.0010002	42.2	.1510	.0010002	42.2	.1510	.0010002
20	84.0	.2963	.0010017	84.0	.2963	.0010017	84.0	.2963	.0010016	84.0	.2963	.0010016
30	125.8	.4365	.0010042	125.8	.4365	.0010042	125.8	.4365	.0010042	125.8	.4365	.0010042
40	167.6	.5721	.0010077	167.6	.5721	.0010077	167.6	.5721	.0010077	167.6	.5721	.0010077
50	209.4	.7034	.0010121	209.4	.7034	.0010120	209.4	.7034	.0010120	209.4	.7034	.0010120
60	251.2	.8309	.0010171	251.2	.8309	.0010171	251.2	.8309	.0010171	251.2	.8309	.0010171
70	293.1	.9547	.0010228	293.1	.9547	.0010228	293.1	.9547	.0010228	293.1	.9547	.0010228
80	335.0	1.0752	.0010291	335.0	1.0752	.0010291	335.0	1.0752	.0010291	335.0	1.0752	.0010291
90	377.0	1.1925	.0010361	377.0	1.1925	.0010361	377.0	1.1925	.0010361	377.0	1.1924	.0010361
100	419.1	1.3068	.0010437	419.1	1.3068	.0010437	419.1	1.3068	.0010437	419.1	1.3068	.0010437
110	461.3	1.4185	.0010519	461.3	1.4185	.0010519	461.3	1.4185	.0010519	461.3	1.4185	.0010518
120	2711.2	7.2693	1.1876	2710.1	7.2373	1.1119	2709.1	7.2072	1.0451	2708.0	7.1786	.98578
130	2731.8	7.3209	1.2203	2730.8	7.2892	1.1428	2729.8	7.2593	1.0743	2728.9	7.2311	1.0135
140	2752.2	7.3709	1.2529	2751.3	7.3395	1.1734	2750.4	7.3098	1.1032	2749.6	7.2818	1.0409
150	2772.5	7.4194	1.2852	2771.7	7.3882	1.2038	2770.9	7.3588	1.1319	2770.1	7.3309	1.0681
160	2792.7	7.4667	1.3173	2792.0	7.4356	1.2340	2791.3	7.4063	1.1605	2790.5	7.3787	1.0951
170	2812.8	7.5126	1.3493	2812.2	7.4817	1.2640	2811.5	7.4526	1.1888	2810.9	7.4251	1.1220
180	2832.9	7.5574	1.3811	2832.3	7.5266	1.2939	2831.7	7.4977	1.2170	2831.1	7.4703	1.1487
190	2852.9	7.6012	1.4128	2852.4	7.5705	1.3237	2851.9	7.5416	1.2451	2851.3	7.5144	1.1753
200	2872.9	7.6439	1.4444	2872.5	7.6133	1.3534	2872.0	7.5846	1.2731	2871.5	7.5574	1.2017
210	2892.9	7.6857	1.4759	2892.5	7.6552	1.3830	2892.0	7.6265	1.3010	2891.6	7.5994	1.2281
220	2912.9	7.7266	1.5073	2912.5	7.6962	1.4125	2912.1	7.6676	1.3288	2911.7	7.6406	1.2544
230	2932.9	7.7667	1.5387	2932.5	7.7364	1.4420	2932.1	7.7078	1.3566	2931.7	7.6809	1.2807
240	2952.9	7.8061	1.5700	2952.5	7.7758	1.4713	2952.2	7.7473	1.3843	2951.8	7.7204	1.3069
250	2972.9	7.8447	1.6013	2972.5	7.8144	1.5007	2972.2	7.7860	1.4119	2971.9	7.7591	1.3330
260	2992.9	7.8826	1.6325	2992.6	7.8524	1.5300	2992.3	7.8240	1.4395	2992.0	7.7972	1.3591
270	3012.9	7.9198	1.6637	3012.7	7.8897	1.5592	3012.4	7.8613	1.4671	3012.1	7.8345	1.3852
280	3033.0	7.9565	1.6948	3032.7	7.9263	1.5885	3032.5	7.8980	1.4946	3032.2	7.8712	1.4112
290	3053.1	7.9925	1.7259	3052.9	7.9624	1.6176	3052.6	7.9341	1.5221	3052.4	7.9074	1.4372
300	3073.3	8.0280	1.7570	3073.0	7.9979	1.6468	3072.8	7.9696	1.5496	3072.6	7.9429	1.4631

TABLE 3 WATER AND STEAM

p(MPa) =	.150			.160			.170			.180		
SAT t(°C)	111.37			113.32			115.17			116.93		
SAT.LIQ	467.1	1.4336	.0010530	475.4	1.4550	.0010547	483.2	1.4752	.0010563	490.7	1.4944	.0010579
SAT.VAP	2693.4	7.2234	1.15904	2696.2	7.2017	1.09111	2699.0	7.1813	1.03093	2701.5	7.1622	.97723
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3093.5	8.0629	1.7881	3093.2	8.0328	1.6760	3093.0	8.0046	1.5770	3092.8	7.9779	1.4891
320	3113.7	8.0973	1.8191	3113.5	8.0672	1.7051	3113.3	8.0390	1.6044	3113.1	8.0124	1.5150
330	3134.0	8.1312	1.8502	3133.8	8.1012	1.7342	3133.6	8.0729	1.6318	3133.4	8.0463	1.5409
340	3154.3	8.1646	1.8812	3154.1	8.1346	1.7633	3153.9	8.1064	1.6592	3153.7	8.0798	1.5667
350	3174.7	8.1976	1.9122	3174.5	8.1676	1.7923	3174.3	8.1394	1.6866	3174.1	8.1128	1.5926
360	3195.1	8.2301	1.9431	3195.0	8.2002	1.8214	3194.8	8.1720	1.7140	3194.6	8.1454	1.6185
370	3215.6	8.2623	1.9741	3215.5	8.2323	1.8504	3215.3	8.2041	1.7413	3215.1	8.1775	1.6443
380	3236.2	8.2940	2.0051	3236.0	8.2640	1.8795	3235.8	8.2358	1.7686	3235.7	8.2093	1.6701
390	3256.8	8.3253	2.0360	3256.6	8.2953	1.9085	3256.5	8.2672	1.7960	3256.3	8.2406	1.6959
400	3277.5	8.3562	2.0669	3277.3	8.3263	1.9375	3277.1	8.2981	1.8233	3277.0	8.2716	1.7218
410	3298.2	8.3868	2.0979	3298.0	8.3568	1.9665	3297.9	8.3287	1.8506	3297.7	8.3022	1.7476
420	3319.0	8.4170	2.1288	3318.8	8.3871	1.9955	3318.7	8.3589	1.8779	3318.5	8.3324	1.7733
430	3339.8	8.4469	2.1597	3339.7	8.4169	2.0245	3339.6	8.3888	1.9052	3339.4	8.3623	1.7991
440	3360.7	8.4764	2.1906	3360.6	8.4465	2.0535	3360.5	8.4184	1.9325	3360.3	8.3918	1.8249
450	3381.7	8.5056	2.2215	3381.6	8.4757	2.0824	3381.5	8.4476	1.9597	3381.3	8.4211	1.8507
460	3402.8	8.5345	2.2524	3402.6	8.5046	2.1114	3402.5	8.4765	1.9870	3402.4	8.4500	1.8764
470	3423.9	8.5631	2.2833	3423.8	8.5332	2.1404	3423.6	8.5051	2.0143	3423.5	8.4786	1.9022
480	3445.0	8.5914	2.3142	3444.9	8.5615	2.1693	3444.8	8.5334	2.0416	3444.7	8.5069	1.9280
490	3466.3	8.6194	2.3451	3466.2	8.5895	2.1983	3466.1	8.5614	2.0688	3466.0	8.5350	1.9537
500	3487.6	8.6472	2.3759	3487.5	8.6173	2.2273	3487.4	8.5892	2.0961	3487.3	8.5627	1.9795
510	3509.0	8.6746	2.4068	3508.9	8.6447	2.2562	3508.8	8.6167	2.1233	3508.7	8.5902	2.0052
520	3530.4	8.7018	2.4377	3530.3	8.6720	2.2851	3530.2	8.6439	2.1506	3530.1	8.6174	2.0309
530	3551.9	8.7288	2.4685	3551.8	8.6989	2.3141	3551.7	8.6708	2.1778	3551.6	8.6444	2.0567
540	3573.5	8.7555	2.4994	3573.4	8.7256	2.3430	3573.3	8.6975	2.2050	3573.2	8.6711	2.0824
550	3595.1	8.7819	2.5302	3595.0	8.7521	2.3719	3595.0	8.7240	2.2323	3594.9	8.6975	2.1081
560	3616.9	8.8082	2.5611	3616.8	8.7783	2.4009	3616.7	8.7502	2.2595	3616.6	8.7238	2.1339
570	3638.6	8.8341	2.5919	3638.5	8.8043	2.4298	3638.5	8.7762	2.2867	3638.4	8.7498	2.1596
580	3660.5	8.8599	2.6228	3660.4	8.8300	2.4587	3660.3	8.8020	2.3140	3660.2	8.7755	2.1853
590	3682.4	8.8854	2.6536	3682.3	8.8556	2.4876	3682.2	8.8275	2.3412	3682.1	8.8011	2.2110
600	3704.4	8.9108	2.6845	3704.3	8.8809	2.5166	3704.2	8.8529	2.3684	3704.1	8.8264	2.2367

TABLE 3 WATER AND STEAM

p(MPa)	.150			.160			.170			.180		
SAT t(°C)	111.37			113.32			115.17			116.93		
SAT.LIQ	467.1	1.4336	.0010530	475.4	1.4550	.0010547	483.2	1.4752	.0010563	490.7	1.4944	.0010579
SAT.VAP	2693.4	7.2234	1.15904	2696.2	7.2017	1.09111	2699.0	7.1813	1.03093	2701.5	7.1622	.97723
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3726.4	8.9359	2.7153	3726.4	8.9060	2.5455	3726.3	8.8780	2.3956	3726.2	8.8515	2.2624
620	3748.6	8.9608	2.7461	3748.5	8.9309	2.5744	3748.4	8.9029	2.4228	3748.3	8.8764	2.2881
630	3770.7	8.9855	2.7770	3770.7	8.9556	2.6033	3770.6	8.9276	2.4501	3770.5	8.9012	2.3138
640	3793.0	9.0100	2.8078	3792.9	8.9801	2.6322	3792.8	8.9521	2.4773	3792.8	8.9257	2.3395
650	3815.3	9.0343	2.8386	3815.2	9.0045	2.6611	3815.2	8.9764	2.5045	3815.1	8.9500	2.3652
660	3837.7	9.0584	2.8694	3837.6	9.0286	2.6900	3837.6	9.0006	2.5317	3837.5	8.9741	2.3909
670	3860.2	9.0824	2.9003	3860.1	9.0525	2.7189	3860.0	9.0245	2.5589	3860.0	8.9981	2.4166
680	3882.7	9.1061	2.9311	3882.6	9.0763	2.7478	3882.6	9.0483	2.5861	3882.5	9.0218	2.4423
690	3905.3	9.1297	2.9619	3905.2	9.0999	2.7767	3905.1	9.0718	2.6133	3905.1	9.0454	2.4680
700	3927.9	9.1531	2.9927	3927.9	9.1233	2.8056	3927.8	9.0952	2.6405	3927.7	9.0688	2.4937
710	3950.7	9.1763	3.0235	3950.6	9.1465	2.8345	3950.5	9.1185	2.6677	3950.5	9.0920	2.5194
720	3973.4	9.1994	3.0544	3973.4	9.1696	2.8634	3973.3	9.1415	2.6949	3973.3	9.1151	2.5451
730	3996.3	9.2223	3.0852	3996.2	9.1925	2.8923	3996.2	9.1644	2.7221	3996.1	9.1380	2.5708
740	4019.2	9.2450	3.1160	4019.2	9.2152	2.9212	4019.1	9.1872	2.7493	4019.0	9.1607	2.5965
750	4042.2	9.2676	3.1468	4042.1	9.2378	2.9500	4042.1	9.2097	2.7764	4042.0	9.1833	2.6221
760	4065.2	9.2900	3.1776	4065.2	9.2602	2.9789	4065.1	9.2322	2.8036	4065.1	9.2057	2.6478
770	4088.3	9.3123	3.2084	4088.3	9.2824	3.0078	4088.2	9.2544	2.8308	4088.2	9.2280	2.6735
780	4111.5	9.3344	3.2392	4111.5	9.3045	3.0367	4111.4	9.2765	2.8580	4111.4	9.2501	2.6992
790	4134.7	9.3563	3.2700	4134.7	9.3265	3.0656	4134.7	9.2985	2.8852	4134.6	9.2721	2.7248
800	4158.0	9.3781	3.3008	4158.0	9.3483	3.0945	4158.0	9.3203	2.9124	4157.9	9.2939	2.7505

TABLE 3 WATER AND STEAM

p(MPa) =	.190			.200			.210			.220		
SAT t(°C)	118.62			120.23			121.78			123.27		
SAT.LIQ	497.8	1.5127	.0010594	504.7	1.5301	.0010608	511.3	1.5468	.0010623	517.6	1.5627	.0010636
SAT.VAP	2704.0	7.1440	.92900	2706.3	7.1268	.88544	2708.5	7.1105	.84590	2710.6	7.0949	.80984
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
-	.2	-.0001	.0010001	.2	-.0001	.0010001	.2	-.0001	.0010001	.2	-.0001	.0010001
10	42.2	.1510	.0010002	42.2	.1510	.0010002	42.2	.1510	.0010002	42.2	.1510	.0010001
20	84.0	.2963	.0010016	84.0	.2963	.0010016	84.1	.2963	.0010016	84.1	.2963	.0010016
30	125.8	.4365	.0010042	125.8	.4364	.0010042	125.9	.4364	.0010042	125.9	.4364	.0010042
40	167.6	.5721	.0010077	167.6	.5720	.0010077	167.6	.5720	.0010077	167.6	.5720	.0010077
50	209.4	.7034	.0010120	209.4	.7034	.0010120	209.4	.7034	.0010120	209.4	.7034	.0010120
60	251.2	.8309	.0010171	251.2	.8309	.0010171	251.3	.8309	.0010171	251.3	.8309	.0010171
70	293.1	.9547	.0010228	293.1	.9547	.0010228	293.1	.9547	.0010228	293.1	.9547	.0010228
80	335.0	1.0752	.0010291	335.0	1.0752	.0010291	335.0	1.0751	.0010291	335.1	1.0751	.0010291
90	377.0	1.1924	.0010361	377.0	1.1924	.0010361	377.0	1.1924	.0010361	377.1	1.1924	.0010361
100	419.1	1.3068	.0010437	419.1	1.3068	.0010437	419.1	1.3068	.0010437	419.2	1.3068	.0010436
110	461.3	1.4185	.0010518	461.4	1.4184	.0010518	461.4	1.4184	.0010518	461.4	1.4184	.0010518
120	2706.9	7.1515	.93266	503.7	1.5276	.0010606	503.7	1.5276	.0010606	503.7	1.5276	.0010606
130	2727.9	7.2042	.95901	2726.9	7.1786	.91000	2725.9	7.1541	.86566	2724.9	7.1307	.82533
140	2748.7	7.2551	.98510	2747.8	7.2298	.93488	2746.9	7.2056	.88945	2746.0	7.1824	.84814
150	2769.3	7.3045	1.0110	2768.5	7.2794	.95954	2767.7	7.2554	.91301	2766.9	7.2324	.87071
160	2789.8	7.3524	1.0366	2789.1	7.3275	.98400	2788.4	7.3036	.93638	2787.7	7.2809	.89309
170	2810.2	7.3990	1.0621	2809.6	7.3742	1.0083	2808.9	7.3505	.95958	2808.3	7.3279	.91529
180	2830.5	7.4443	1.0875	2830.0	7.4196	1.0325	2829.4	7.3961	.98264	2828.8	7.3736	.93736
190	2850.8	7.4885	1.1127	2850.3	7.4639	1.0565	2849.7	7.4405	1.0056	2849.2	7.4181	.95929
200	2871.0	7.5316	1.1379	2870.5	7.5072	1.0804	2870.0	7.4838	1.0284	2869.5	7.4616	.98113
210	2891.1	7.5738	1.1629	2890.7	7.5494	1.1042	2890.2	7.5262	1.0511	2889.8	7.5040	1.0029
220	2911.3	7.6153	1.1879	2910.8	7.5907	1.1280	2910.4	7.5675	1.0738	2910.0	7.5454	1.0245
230	2931.4	7.6554	1.2128	2931.0	7.6311	1.1517	2930.6	7.6080	1.0964	2930.2	7.5860	1.0461
240	2951.5	7.6949	1.2376	2951.1	7.6707	1.1753	2950.7	7.6477	1.1189	2950.4	7.6257	1.0676
250	2971.6	7.7337	1.2624	2971.2	7.7096	1.1989	2970.9	7.6866	1.1414	2970.6	7.6646	1.0891
260	2991.7	7.7718	1.2872	2991.4	7.7477	1.2224	2991.0	7.7247	1.1638	2990.7	7.7028	1.1106
270	3011.8	7.8092	1.3119	3011.5	7.7851	1.2459	3011.2	7.7622	1.1862	3010.9	7.7403	1.1319
280	3031.9	7.8459	1.3365	3031.7	7.8219	1.2693	3031.4	7.7990	1.2086	3031.1	7.7772	1.1533
290	3052.1	7.8821	1.3612	3051.9	7.8581	1.2928	3051.6	7.8352	1.2309	3051.3	7.8134	1.1746
300	3072.3	7.9176	1.3858	3072.1	7.8937	1.3162	3071.8	7.8708	1.2532	3071.6	7.8491	1.1959

TABLE 3 WATER AND STEAM

p(MPa) =	.190			.200			.210			.220		
SAT t(°C)	118.62			120.23			121.78			123.27		
SAT.LIQ	497.8	1.5127	.0010594	504.7	1.5301	.0010608	511.3	1.5468	.0010623	517.6	1.5627	.0010636
SAT.VAP	2704.0	7.1440	.92900	2706.3	7.1268	.88544	2708.5	7.1105	.84590	2710.6	7.0949	.80984
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3092.6	7.9527	1.4104	3092.3	7.9287	1.3395	3092.1	7.9059	1.2755	3091.9	7.8841	1.2172
320	3112.8	7.9871	1.4349	3112.6	7.9632	1.3629	3112.4	7.9404	1.2977	3112.2	7.9187	1.2385
330	3133.2	8.0211	1.4595	3133.0	7.9972	1.3862	3132.7	7.9744	1.3199	3132.5	7.9527	1.2597
340	3153.5	8.0546	1.4840	3153.3	8.0307	1.4095	3153.1	8.0080	1.3422	3152.9	7.9863	1.2809
350	3174.0	8.0876	1.5085	3173.8	8.0638	1.4328	3173.6	8.0410	1.3644	3173.4	8.0193	1.3021
360	3194.4	8.1202	1.5330	3194.2	8.0964	1.4561	3194.1	8.0736	1.3866	3193.9	8.0520	1.3233
370	3214.9	8.1524	1.5575	3214.8	8.1285	1.4794	3214.6	8.1058	1.4087	3214.4	8.0842	1.3445
380	3235.5	8.1841	1.5820	3235.4	8.1603	1.5027	3235.2	8.1376	1.4309	3235.0	8.1159	1.3656
390	3256.2	8.2155	1.6065	3256.0	8.1916	1.5259	3255.8	8.1690	1.4531	3255.7	8.1473	1.3868
400	3276.8	8.2465	1.6309	3276.7	8.2226	1.5492	3276.5	8.1999	1.4752	3276.4	8.1783	1.4080
410	3297.6	8.2771	1.6554	3297.4	8.2532	1.5724	3297.3	8.2306	1.4973	3297.2	8.2089	1.4291
420	3316.4	8.3073	1.6798	3318.3	8.2835	1.5956	3318.1	8.2608	1.5195	3318.0	8.2392	1.4502
430	3339.3	8.3372	1.7042	3339.1	8.3134	1.6188	3339.0	8.2907	1.5416	3338.9	8.2691	1.4713
440	3360.2	8.3668	1.7287	3360.1	8.3429	1.6421	3359.9	8.3203	1.5637	3359.8	8.2987	1.4925
450	3381.2	8.3960	1.7531	3381.1	8.3722	1.6653	3381.0	8.3495	1.5858	3380.8	8.3279	1.5136
460	3402.3	8.4249	1.7775	3402.1	8.4011	1.6885	3402.0	8.3785	1.6079	3401.9	8.3569	1.5347
470	3423.4	8.4535	1.8019	3423.3	8.4297	1.7117	3423.2	8.4071	1.6300	3423.0	8.3855	1.5558
480	3444.6	8.4819	1.8263	3444.5	8.4581	1.7349	3444.3	8.4354	1.6521	3444.2	8.4139	1.5769
490	3465.8	8.5099	1.8507	3465.7	8.4861	1.7580	3465.6	8.4635	1.6742	3465.5	8.4419	1.5980
500	3487.2	8.5377	1.8751	3487.0	8.5139	1.7812	3486.9	8.4913	1.6963	3486.8	8.4697	1.6190
510	3506.5	8.5651	1.8995	3506.4	8.5414	1.8044	3508.3	8.5187	1.7184	3508.2	8.4972	1.6401
520	3530.0	8.5924	1.9239	3529.9	8.5686	1.8276	3529.8	8.5460	1.7404	3529.7	8.5244	1.6612
530	3551.5	8.6193	1.9483	3551.4	8.5956	1.8508	3551.3	8.5729	1.7625	3551.2	8.5514	1.6823
540	3573.1	8.6460	1.9727	3573.0	8.6223	1.8739	3572.9	8.5997	1.7846	3572.8	8.5781	1.7033
550	3594.8	8.6725	1.9971	3594.7	8.6487	1.8971	3594.6	8.6261	1.8066	3594.5	8.6046	1.7244
560	3616.5	8.6987	2.0214	3616.4	8.6750	1.9202	3616.3	8.6524	1.8287	3616.2	8.6308	1.7455
570	3638.3	8.7247	2.0458	3638.2	8.7010	1.9434	3638.1	8.6784	1.8508	3638.0	8.6568	1.7665
580	3660.1	8.7505	2.0702	3660.0	8.7268	1.9666	3660.0	8.7042	1.8728	3659.9	8.6826	1.7876
590	3682.1	8.7761	2.0945	3682.0	8.7523	1.9897	3681.9	8.7297	1.8949	3681.8	8.7082	1.8086
600	37 4.1	8.8014	2.1189	3704.0	8.7776	2.0129	3703.9	8.7551	1.9169	3703.8	8.7335	1.8297

TABLE 3 WATER AND STEAM

p(MPa) =	.190			.200			.210			.220		
SAT t(°C)	118.62			120.23			121.78			123.27		
SAT.LIQ	497.8	1.5127	.0010594	504.7	1.5301	.0010606	511.3	1.5468	.0010623	517.6	1.5627	.0010636
SAT.VAP	2704.0	7.1440	.92900	2706.3	7.1268	.88544	2708.5	7.1105	.84590	2710.6	7.0949	.80984
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3726.1	8.8265	2.1433	3726.0	8.8028	2.0360	3726.0	8.7802	1.9390	3725.9	8.7586	1.8507
620	3748.2	8.8514	2.1676	3748.2	8.8277	2.0591	3748.1	8.8051	1.9610	3748.0	8.7836	1.8718
630	3770.4	8.8761	2.1920	3770.4	8.8524	2.0823	3770.3	8.8298	1.9830	3770.2	8.8083	1.8928
640	3792.7	8.9007	2.2163	3792.6	8.8769	2.1054	3792.6	8.8543	2.0051	3792.5	8.8328	1.9139
650	3815.0	8.9250	2.2407	3815.0	8.9012	2.1286	3814.9	8.8787	2.0271	3814.8	8.8571	1.9349
660	3837.4	8.9491	2.2650	3837.4	8.9254	2.1517	3837.3	8.9028	2.0491	3837.2	8.8813	1.9559
670	3859.9	8.9731	2.2894	3859.8	8.9493	2.1748	3859.8	8.9268	2.0712	3859.7	8.9052	1.9770
680	3882.4	8.9968	2.3137	3882.4	8.9731	2.1979	3882.3	8.9505	2.0932	3882.2	8.9290	1.9980
690	3905.0	9.0204	2.3380	3905.0	8.9967	2.2211	3904.9	8.9741	2.1152	3904.8	8.9526	2.0190
700	3927.7	9.0438	2.3624	3927.6	9.0201	2.2442	3927.6	8.9975	2.1373	3927.5	8.9760	2.0401
710	3950.4	9.0670	2.3867	3950.4	9.0433	2.2673	3950.3	9.0208	2.1593	3950.2	8.9992	2.0611
720	3973.2	9.0901	2.4111	3973.1	9.0664	2.2904	3973.1	9.0438	2.1813	3973.0	9.0223	2.0821
730	3996.1	9.1130	2.4354	3996.0	9.0893	2.3136	3996.0	9.0667	2.2033	3995.9	9.0452	2.1031
740	4019.0	9.1357	2.4597	4018.9	9.1120	2.3367	4018.9	9.0895	2.2254	4018.8	9.0680	2.1242
750	4042.0	9.1583	2.4841	4041.9	9.1346	2.3598	4041.9	9.1121	2.2474	4041.8	9.0905	2.1452
760	4065.0	9.1807	2.5084	4065.0	9.1570	2.3829	4064.9	9.1345	2.2694	4064.9	9.1130	2.1662
770	4088.1	9.2030	2.5327	4088.1	9.1793	2.4060	4088.0	9.1567	2.2914	4088.0	9.1352	2.1872
780	4111.3	9.2251	2.5571	4111.3	9.2014	2.4291	4111.2	9.1789	2.3134	4111.2	9.1574	2.2082
790	4134.6	9.2471	2.5814	4134.5	9.2234	2.4523	4134.5	9.2008	2.3354	4134.4	9.1793	2.2292
800	4157.9	9.2689	2.6057	4157.8	9.2452	2.4754	4157.8	9.2226	2.3575	4157.7	9.2011	2.2502

TABLE 3 WATER AND STEAM

p(MPa)	= .230			.240			.250			.260		
SAT t(°C)	124.71			126.09			127.43			128.73		
SAT.LIQ	523.7	1.5781	.0010650	529.6	1.5929	.0010663	535.3	1.6071	.0010675	540.9	1.6209	.0010688
SAT.VAP	2712.6	7.0800	.77681	2714.5	7.0657	.74645	2716.4	7.0520	.71844	2718.2	7.0389	.69251
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	.2	-.0001	.0010001	.2	-.0001	.0010001	.2	-.0001	.0010001	.2	-.0001	.0010001
10	42.2	.1510	.0010001	42.2	.1510	.0010001	42.2	.1510	.0010001	42.2	.1510	.0010001
20	84.1	.2963	.0010016	84.1	.2962	.0010016	84.1	.2962	.0010016	84.1	.2962	.0010016
30	125.9	.4364	.0010042	125.9	.4364	.0010042	125.9	.4364	.0010042	125.9	.4364	.0010042
40	167.6	.5720	.0010077	167.7	.5720	.0010077	167.7	.5720	.0010077	167.7	.5720	.0010077
50	209.4	.7034	.0010120	209.5	.7034	.0010120	209.5	.7034	.0010120	209.5	.7034	.0010120
60	251.3	.8309	.0010170	251.3	.8309	.0010170	251.3	.8309	.0010170	251.3	.8309	.0010170
70	293.1	.9547	.0010228	293.1	.9547	.0010228	293.2	.9547	.0010227	293.2	.9547	.0010227
80	335.1	1.0751	.0010291	335.1	1.0751	.0010291	335.1	1.0751	.0010291	335.1	1.0751	.0010291
90	377.1	1.1924	.0010361	377.1	1.1924	.0010361	377.1	1.1924	.0010361	377.1	1.1924	.0010361
100	419.2	1.3068	.0010436	419.2	1.3068	.0010436	419.2	1.3068	.0010436	419.2	1.3067	.0010436
110	461.4	1.4184	.0010518	461.4	1.4184	.0010518	461.4	1.4184	.0010518	461.4	1.4184	.0010518
120	503.7	1.5276	.0010606	503.7	1.5276	.0010606	503.8	1.5275	.0010606	503.8	1.5275	.0010606
130	2723.9	7.1082	.78852	2722.9	7.0866	.75476	2721.9	7.0658	.72370	2720.9	7.0457	.69503
140	2745.1	7.1602	.81041	2744.2	7.1388	.77583	2743.3	7.1183	.74401	2742.4	7.0984	.71464
150	2766.1	7.2104	.83208	2765.3	7.1893	.79667	2764.5	7.1689	.76409	2763.7	7.1493	.73402
160	2787.0	7.2590	.85355	2786.2	7.2381	.81731	2785.5	7.2179	.78397	2784.8	7.1985	.75319
170	2807.6	7.3062	.87485	2807.0	7.2854	.83778	2806.3	7.2654	.80367	2805.6	7.2461	.77219
180	2828.2	7.3521	.89601	2827.6	7.3314	.85810	2827.0	7.3115	.82323	2826.4	7.2924	.79104
190	2848.6	7.3967	.91704	2848.1	7.3762	.87830	2847.5	7.3564	.84266	2847.0	7.3374	.80976
200	2869.0	7.4402	.93796	2868.5	7.4198	.89839	2868.0	7.4001	.86198	2867.5	7.3812	.82838
210	2889.3	7.4827	.95879	2888.9	7.4624	.91838	2888.4	7.4428	.88121	2887.9	7.4240	.84690
220	2909.6	7.5242	.97954	2909.2	7.5040	.93830	2908.7	7.4845	.90036	2908.3	7.4657	.86534
230	2929.8	7.5649	1.0002	2929.4	7.5446	.95814	2929.0	7.5252	.91944	2928.7	7.5065	.88371
240	2950.0	7.6046	1.0208	2949.7	7.5845	.97793	2949.3	7.5651	.93845	2948.9	7.5465	.90201
250	2970.2	7.6436	1.0414	2969.9	7.6235	.99766	2969.6	7.6042	.95741	2969.2	7.5856	.92027
260	2990.4	7.6819	1.0619	2990.1	7.6618	1.0173	2989.8	7.6425	.97633	2989.5	7.6240	.93847
270	3010.6	7.7194	1.0824	3010.3	7.6994	1.0370	3010.0	7.6801	.99521	3009.8	7.6616	.95664
280	3030.8	7.7563	1.1028	3030.6	7.7363	1.0566	3030.3	7.7171	1.0140	3030.0	7.6986	.97477
290	3051.1	7.7926	1.1233	3050.8	7.7726	1.0762	3050.6	7.7534	1.0329	3050.3	7.7350	.99287
300	3071.3	7.8282	1.1437	3071.1	7.8083	1.0957	3070.9	7.7891	1.0516	3070.6	7.7707	1.0109

TABLE 3 WATER AND STEAM

p(MPa) =	.230			.240			.250			.260		
SAT t(°C)	124.71			126.09			127.43			128.73		
SAT.LIQ	523.7	1.5781	.0010650	529.6	1.5929	.0010663	535.3	1.6071	.0010675	540.9	1.6209	.0010688
SAT.VAP	2712.6	7.0800	.77681	2714.5	7.0657	.74645	2716.4	7.0520	.71844	2718.2	7.0389	.69251
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3091.6	7.8633	1.1640	3091.4	7.8434	1.1153	3091.2	7.8243	1.0704	3091.0	7.8059	1.0290
320	3112.0	7.8979	1.1844	3111.8	7.8780	1.1348	3111.5	7.8589	1.0891	3111.3	7.8405	1.0470
330	3132.3	7.9319	1.2047	3132.1	7.9121	1.1543	3131.9	7.8930	1.1079	3131.7	7.8746	1.0650
340	3152.7	7.9655	1.2250	3152.6	7.9456	1.1737	3152.4	7.9266	1.1266	3152.2	7.9082	1.0830
350	3173.2	7.9986	1.2453	3173.0	7.9787	1.1932	3172.8	7.9597	1.1452	3172.6	7.9414	1.1010
360	3193.7	8.0312	1.2656	3193.5	8.0114	1.2126	3193.3	7.9923	1.1639	3193.2	7.9740	1.1190
370	3214.3	8.0634	1.2858	3214.1	8.0436	1.2321	3213.9	8.0246	1.1826	3213.7	8.0063	1.1369
380	3234.9	8.0952	1.3061	3234.7	8.0754	1.2515	3234.5	8.0564	1.2012	3234.4	8.0381	1.1549
390	3255.5	8.1266	1.3263	3255.4	8.1068	1.2709	3255.2	8.0878	1.2199	3255.0	8.0695	1.1728
400	3276.2	8.1576	1.3466	3276.1	8.1378	1.2903	3275.9	8.1188	1.2385	3275.8	8.1005	1.1907
410	3297.0	8.1883	1.3668	3296.9	8.1685	1.3097	3296.7	8.1495	1.2571	3296.6	8.1312	1.2086
420	3317.8	8.2185	1.3870	3317.7	8.1987	1.3290	3317.6	8.1797	1.2757	3317.4	8.1615	1.2265
430	3338.7	8.2485	1.4072	3338.6	8.2287	1.3484	3338.5	8.2097	1.2943	3338.3	8.1914	1.2444
440	3359.7	8.2780	1.4274	3359.5	8.2583	1.3678	3359.4	8.2393	1.3129	3359.3	8.2211	1.2623
450	3380.7	8.3073	1.4476	3380.6	8.2875	1.3872	3380.4	8.2686	1.3315	3380.3	8.2503	1.2802
460	3401.8	8.3362	1.4678	3401.6	8.3165	1.4065	3401.5	8.2975	1.3501	3401.4	8.2793	1.2981
470	3422.9	8.3649	1.4880	3422.8	8.3451	1.4259	3422.7	8.3262	1.3687	3422.6	8.3080	1.3159
480	3444.1	8.3932	1.5082	3444.0	8.3735	1.4452	3443.9	8.3545	1.3873	3443.8	8.3363	1.3336
490	3465.4	8.4213	1.5284	3465.3	8.4015	1.4645	3465.2	8.3826	1.4058	3465.0	8.3644	1.3517
500	3486.7	8.4491	1.5485	3486.6	8.4293	1.4839	3486.5	8.4104	1.4244	3486.4	8.3922	1.3695
510	3508.1	8.4766	1.5687	3508.0	8.4568	1.5032	3507.9	8.4379	1.4430	3507.8	8.4197	1.3874
520	3529.6	8.5038	1.5889	3529.5	8.4841	1.5225	3529.4	8.4651	1.4615	3529.3	8.4469	1.4052
530	3551.1	8.5308	1.6090	3551.0	8.5110	1.5419	3550.9	8.4921	1.4801	3550.8	8.4739	1.4231
540	3572.7	8.5575	1.6292	3572.6	8.5378	1.5612	3572.5	8.5188	1.4986	3572.4	8.5007	1.4409
550	3594.4	8.5840	1.6493	3594.3	8.5643	1.5805	3594.2	8.5453	1.5172	3594.1	8.5271	1.4587
560	3616.1	8.6102	1.6695	3616.0	8.5905	1.5998	3615.9	8.5716	1.5357	3615.8	8.5534	1.4766
570	3637.9	8.6362	1.6896	3637.8	8.6165	1.6191	3637.7	8.5976	1.5543	3637.7	8.5794	1.4944
580	3659.8	8.6620	1.7098	3659.7	8.6423	1.6384	3659.6	8.6234	1.5728	3659.5	8.6052	1.5122
590	3681.7	8.6876	1.7299	3681.6	8.6679	1.6577	3681.6	8.6490	1.5914	3681.5	8.6308	1.5301
600	3703.7	8.7129	1.7500	3703.6	8.6932	1.6770	3703.6	8.6743	1.6099	3703.5	8.6561	1.5479

TABLE 3 WATER AND STEAM

p(MPa)	.230			.240			.250			.260		
SAT t(°C)	124.71			126.09			127.43			128.73		
SAT.LIQ	523.7	1.5781	.0010650	529.6	1.5929	.0010663	535.3	1.6071	.0010675	540.9	1.6209	.0010688
SAT.VAP	2712.6	7.0800	.77681	2714.5	7.0657	.74645	2716.4	7.0520	.71844	2718.2	7.0389	.69251
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3725.8	8.7381	1.7702	3725.7	8.7184	1.6963	3725.6	8.6994	1.6284	3725.6	8.6813	1.5657
620	3747.9	8.7630	1.7903	3747.9	8.7433	1.7156	3747.8	8.7244	1.6469	3747.7	8.7062	1.5835
630	3770.1	8.7877	1.8104	3770.1	8.7680	1.7349	3770.0	8.7491	1.6655	3769.9	8.7309	1.6013
640	3792.4	8.8122	1.8306	3792.3	8.7925	1.7542	3792.3	8.7736	1.6840	3792.2	8.7555	1.6192
650	3814.7	8.8366	1.8507	3814.7	8.8169	1.7735	3814.6	8.7980	1.7025	3814.5	8.7798	1.6370
660	3837.2	8.8607	1.8708	3837.1	8.8410	1.7928	3837.0	8.8221	1.7210	3836.9	8.8039	1.6548
670	3859.6	8.8847	1.8909	3859.6	8.8650	1.8121	3859.5	8.8461	1.7395	3859.4	8.8279	1.6726
680	3882.2	8.9084	1.9111	3882.1	8.8887	1.8314	3882.0	8.8698	1.7581	3882.0	8.8517	1.6904
690	3904.8	8.9320	1.9312	3904.7	8.9123	1.8507	3904.6	8.8934	1.7766	3904.6	8.8753	1.7082
700	3927.4	8.9554	1.9513	3927.4	8.9357	1.8699	3927.3	8.9169	1.7951	3927.2	8.8987	1.7260
710	3950.2	8.9787	1.9714	3950.1	8.9590	1.8892	3950.1	8.9401	1.8136	3950.0	8.9220	1.7438
720	3973.0	9.0018	1.9915	3972.9	8.9821	1.9085	3972.9	8.9632	1.8321	3972.8	8.9450	1.7616
730	3995.8	9.0247	2.0116	3995.8	9.0050	1.9278	3995.7	8.9861	1.8506	3995.7	8.9679	1.7794
740	4018.8	9.0474	2.0317	4018.7	9.0277	1.9470	4018.7	9.0088	1.8691	4018.6	8.9907	1.7972
750	4041.8	9.0700	2.0519	4041.7	9.0503	1.9663	4041.7	9.0314	1.8876	4041.6	9.0133	1.8150
760	4064.8	9.0924	2.0720	4064.8	9.0727	1.9856	4064.7	9.0539	1.9061	4064.7	9.0357	1.8328
770	4087.9	9.1147	2.0921	4087.9	9.0950	2.0048	4087.8	9.0761	1.9246	4087.8	9.0580	1.8505
780	4111.1	9.1368	2.1122	4111.1	9.1171	2.0241	4111.0	9.0982	1.9431	4111.0	9.0801	1.8683
790	4134.4	9.1588	2.1323	4134.3	9.1391	2.0434	4134.3	9.1202	1.9616	4134.2	9.1021	1.8861
800	4157.7	9.1806	2.1524	4157.6	9.1609	2.0626	4157.6	9.1420	1.9801	4157.5	9.1239	1.9039

TABLE 3 WATER AND STEAM

p(MPa)	.270			.280			.290			.300		
SAT t(°C)	129.98			131.20			132.39			133.54		
SAT.LIQ	546.2	1.6342	.0010700	551.4	1.6471	.0010712	556.5	1.6595	.0010724	561.4	1.6716	.0010735
SAT.VAP	2719.9	7.0262	.66044	2721.5	7.0140	.64604	2723.1	7.0023	.62513	2724.7	6.9909	.60556
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
	.2	-.0001	.0010001	.2	-.0001	.0010001	.3	-.0001	.0010001	.3	-.0001	.0010001
10	42.3	.1510	.0010001	42.3	.1510	.0010001	42.3	.1510	.0010001	42.3	.1510	.0010001
20	84.1	.2962	.0010016	84.1	.2962	.0010016	84.1	.2962	.0010016	84.1	.2962	.0010016
30	125.9	.4364	.0010042	125.9	.4364	.0010042	125.9	.4364	.0010042	125.9	.4364	.0010042
40	167.7	.5720	.0010077	167.7	.5720	.0010077	167.7	.5720	.0010077	167.7	.5720	.0010077
50	209.5	.7034	.0010120	209.5	.7034	.0010120	209.5	.7034	.0010120	209.5	.7034	.0010120
60	251.3	.8309	.0010170	251.3	.8308	.0010170	251.3	.8308	.0010170	251.3	.8308	.0010170
70	293.2	.9547	.0010227	293.2	.9547	.0010227	293.2	.9547	.0010227	293.2	.9547	.0010227
80	335.1	1.0751	.0010291	335.1	1.0751	.0010291	335.1	1.0751	.0010291	335.1	1.0751	.0010291
90	377.1	1.1924	.0010360	377.1	1.1924	.0010360	377.1	1.1924	.0010360	377.1	1.1924	.0010360
100	419.2	1.3067	.0010436	419.2	1.3067	.0010436	419.2	1.3067	.0010436	419.2	1.3067	.0010436
110	461.4	1.4184	.0010518	461.4	1.4184	.0010518	461.4	1.4184	.0010518	461.4	1.4184	.0010518
120	503.8	1.5275	.0010606	503.8	1.5275	.0010606	503.8	1.5275	.0010606	503.8	1.5275	.0010606
130	2719.9	7.0263	.66847	546.3	1.6344	.0010700	546.3	1.6343	.0010700	546.3	1.6343	.0010700
140	2741.5	7.0793	.68744	2740.6	7.0607	.66218	2739.7	7.0428	.63865	2738.8	7.0254	.61670
150	2762.9	7.1304	.70616	2762.1	7.1120	.68030	2761.3	7.0943	.65622	2760.4	7.0771	.63374
160	2784.0	7.1797	.72469	2783.3	7.1616	.69822	2782.6	7.1441	.67357	2781.8	7.1271	.65057
170	2805.0	7.2276	.74303	2804.3	7.2096	.71596	2803.6	7.1922	.69075	2803.0	7.1754	.66722
180	2825.8	7.2740	.76123	2825.2	7.2561	.73355	2824.6	7.2389	.70778	2824.0	7.2222	.68372
190	2846.4	7.3191	.77930	2845.9	7.3014	.75101	2845.3	7.2842	.72468	2844.8	7.2677	.70009
200	2867.0	7.3630	.79726	2866.5	7.3454	.76837	2866.0	7.3284	.74146	2865.5	7.3119	.71635
210	2887.5	7.4058	.81513	2887.0	7.3883	.78562	2886.6	7.3714	.75815	2886.1	7.3550	.73251
220	2907.9	7.4476	.83291	2907.5	7.4302	.80280	2907.1	7.4134	.77476	2906.6	7.3971	.74859
230	2928.3	7.4885	.85062	2927.9	7.4712	.81990	2927.5	7.4544	.79130	2927.1	7.4381	.76460
240	2948.6	7.5285	.86827	2948.2	7.5112	.83694	2947.9	7.4945	.80777	2947.5	7.4783	.78054
250	2968.9	7.5677	.88587	2968.6	7.5504	.85393	2968.2	7.5338	.82419	2967.9	7.5176	.79644
260	2989.2	7.6061	.90342	2988.9	7.5889	.87087	2988.6	7.5723	.84056	2988.2	7.5562	.81228
270	3009.5	7.6438	.92093	3009.2	7.6266	.88777	3008.9	7.6100	.85690	3008.6	7.5940	.82808
280	3029.8	7.6808	.93841	3029.5	7.6637	.90464	3029.2	7.6471	.87319	3028.9	7.6311	.84385
290	3050.1	7.7172	.95585	3049.8	7.7001	.92147	3049.5	7.6836	.88946	3049.3	7.6676	.85959
300	3070.4	7.7530	.97327	3070.1	7.7359	.93828	3069.9	7.7194	.90570	3069.7	7.7034	.87529

TABLE 3 WATER AND STEAM

p(MPa)	.270			.280			.290			.300		
SAT t(°C)	129.98			131.20			132.39			133.54		
SAT.LIQ	546.2	1.6342	.0010700	551.4	1.6471	.0010712	556.5	1.6595	.0010724	561.4	1.6716	.0010735
SAT.VAP	2719.9	7.0262	.66844	2721.5	7.0140	.64604	2723.1	7.0023	.62513	2724.7	6.9909	.60556
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3090.7	7.7882	.99066	3090.5	7.7711	.95506	3090.3	7.7546	.92191	3090.0	7.7387	.89098
320	3111.1	7.8228	1.0080	3110.9	7.8058	.97182	3110.7	7.7893	.93811	3110.5	7.7734	.90664
330	3131.5	7.8569	1.0254	3131.3	7.8399	.98856	3131.1	7.8235	.95428	3130.9	7.8076	.92228
340	3152.0	7.8906	1.0427	3151.8	7.8736	1.0053	3151.6	7.8571	.97043	3151.4	7.8412	.93791
350	3172.5	7.9237	1.0600	3172.3	7.9067	1.0220	3172.1	7.8903	.98658	3171.9	7.8744	.95352
360	3193.0	7.9564	1.0773	3192.8	7.9394	1.0387	3192.6	7.9230	1.0027	3192.4	7.9072	.96911
370	3213.6	7.9887	1.0946	3213.4	7.9717	1.0554	3213.2	7.9553	1.0188	3213.1	7.9395	.98470
380	3234.2	8.0205	1.1119	3234.0	8.0035	1.0720	3233.9	7.9872	1.0349	3233.7	7.9713	1.0003
390	3254.9	8.0519	1.1292	3254.7	8.0350	1.0887	3254.6	8.0186	1.0510	3254.4	8.0028	1.0158
400	3275.6	8.0830	1.1464	3275.5	8.0660	1.1054	3275.3	8.0497	1.0671	3275.2	8.0338	1.0314
410	3296.4	8.1136	1.1637	3296.3	8.0967	1.1220	3296.1	8.0803	1.0832	3296.0	8.0645	1.0469
420	3317.3	8.1439	1.1809	3317.1	8.1270	1.1386	3317.0	8.1107	1.0992	3316.8	8.0949	1.0625
430	3338.2	8.1739	1.1982	3338.0	8.1570	1.1553	3337.9	8.1406	1.1153	3337.8	8.1248	1.0780
440	3359.2	8.2035	1.2154	3359.0	8.1866	1.1719	3358.9	8.1702	1.1314	3358.8	8.1545	1.0936
450	3380.2	8.2328	1.2326	3380.1	8.2159	1.1885	3379.9	8.1995	1.1474	3379.8	8.1838	1.1090
460	3401.3	8.2618	1.2499	3401.2	8.2448	1.2051	3401.0	8.2285	1.1634	3400.9	8.2128	1.1245
470	3422.4	8.2904	1.2671	3422.3	8.2735	1.2217	3422.2	8.2572	1.1795	3422.1	8.2414	1.1401
480	3443.7	8.3188	1.2843	3443.5	8.3019	1.2383	3443.4	8.2856	1.1955	3443.3	8.2698	1.1556
490	3464.9	8.3469	1.3015	3464.8	8.3300	1.2549	3464.7	8.3137	1.2115	3464.6	8.2979	1.1710
500	3486.3	8.3746	1.3187	3486.2	8.3578	1.2715	3486.1	8.3415	1.2276	3486.0	8.3257	1.1865
510	3507.7	8.4022	1.3359	3507.6	8.3853	1.2881	3507.5	8.3690	1.2436	3507.4	8.3532	1.2020
520	3529.2	8.4294	1.3531	3529.1	8.4125	1.3047	3529.0	8.3962	1.2596	3528.9	8.3805	1.2175
530	3550.7	8.4564	1.3703	3550.6	8.4395	1.3212	3550.5	8.4232	1.2756	3550.4	8.4075	1.2330
540	3572.3	8.4831	1.3874	3572.2	8.4663	1.3378	3572.1	8.4500	1.2916	3572.0	8.4343	1.2485
550	3594.0	8.5096	1.4046	3593.9	8.4928	1.3544	3593.8	8.4765	1.3076	3593.7	8.4608	1.2639
560	3615.8	8.5359	1.4218	3615.7	8.5190	1.3709	3615.6	8.5028	1.3236	3615.5	8.4870	1.2794
570	3637.6	8.5619	1.4390	3637.5	8.5451	1.3875	3637.4	8.5288	1.3396	3637.3	8.5131	1.2949
580	3659.4	8.5877	1.4562	3659.4	8.5709	1.4041	3659.3	8.5546	1.3556	3659.2	8.5389	1.3103
590	3681.4	8.6133	1.4733	3681.3	8.5964	1.4206	3681.2	8.5802	1.3716	3681.1	8.5644	1.3258
600	3703.4	8.6386	1.4905	3703.3	8.6218	1.4372	3703.2	8.6055	1.3876	3703.2	8.5898	1.3412

TABLE 3 WATER AND STEAM

p(MPa) =	.270			.280			.290			.300		
SAT t(°C)	129.98			131.20			132.39			133.54		
SAT.LIQ	546.2	1.6342	.0010700	551.4	1.6471	.0010712	556.5	1.6595	.0010724	561.4	1.6716	.0010735
SAT.VAP	2719.9	7.0262	.66844	2721.5	7.0140	.64604	2723.1	7.0023	.62513	2724.7	6.9909	.60556
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3725.5	8.6638	1.5076	3725.4	8.6469	1.4537	3725.3	8.6307	1.4035	3725.2	8.6150	1.3567
620	3747.6	8.6887	1.5248	3747.5	8.6719	1.4703	3747.5	8.6556	1.4195	3747.4	8.6399	1.3721
630	3769.8	8.7135	1.5420	3769.8	8.6966	1.4868	3769.7	8.6803	1.4355	3769.6	8.6646	1.3876
640	3792.1	8.7380	1.5591	3792.0	8.7211	1.5034	3792.0	8.7049	1.4515	3791.9	8.6892	1.4030
650	3814.5	8.7623	1.5763	3814.4	8.7455	1.5199	3814.3	8.7292	1.4675	3814.2	8.7135	1.4185
660	3836.9	8.7865	1.5934	3836.8	8.7696	1.5365	3836.7	8.7534	1.4834	3836.7	8.7377	1.4339
670	3859.4	8.8104	1.6106	3859.3	8.7936	1.5530	3859.2	8.7773	1.4994	3859.2	8.7616	1.4494
680	3881.9	8.8342	1.6277	3881.8	8.8174	1.5695	3881.8	8.8011	1.5154	3881.7	8.7854	1.4648
690	3904.5	8.8578	1.6449	3904.4	8.8410	1.5861	3904.4	8.8247	1.5313	3904.3	8.8090	1.4802
700	3927.2	8.8812	1.6620	3927.1	8.8644	1.6026	3927.1	8.8482	1.5473	3927.0	8.8325	1.4957
710	3949.9	8.9045	1.6792	3949.9	8.8877	1.6191	3949.8	8.8714	1.5633	3949.7	8.8557	1.5111
720	3972.7	8.9276	1.6963	3972.7	8.9107	1.6357	3972.6	8.8945	1.5792	3972.6	8.8788	1.5265
730	3995.6	8.9505	1.7134	3995.6	8.9337	1.6522	3995.5	8.9174	1.5952	3995.4	8.9017	1.5420
740	4018.5	8.9732	1.7306	4018.5	8.9564	1.6687	4018.4	8.9402	1.6111	4018.4	8.9245	1.5574
750	4041.5	8.9958	1.7477	4041.5	8.9790	1.6852	4041.4	8.9628	1.6271	4041.4	8.9471	1.5728
760	4064.6	9.0183	1.7648	4064.6	9.0014	1.7018	4064.5	8.9852	1.6430	4064.4	8.9695	1.5882
770	4087.7	9.0405	1.7820	4087.7	9.0237	1.7183	4087.6	9.0075	1.6590	4087.6	8.9918	1.6037
780	4110.9	9.0627	1.7991	4110.9	9.0458	1.7348	4110.8	9.0296	1.6750	4110.8	9.0139	1.6191
790	4134.2	9.0846	1.8162	4134.1	9.0678	1.7513	4134.1	9.0516	1.6909	4134.0	9.0359	1.6345
800	4157.5	9.1065	1.8334	4157.4	9.0896	1.7678	4157.4	9.0734	1.7069	4157.3	9.0577	1.6499

TABLE 3 WATER AND STEAM

p(MPa) =	.320			.340			.360			.380		
SAT t(°C)	135.75			137.86			139.86			141.78		
SAT.LIQ	570.9	1.6948	.0011757	579.9	1.7168	.0010779	588.5	1.7376	.0010799	596.8	1.7574	.0010819
SAT.VAP	2727.6	6.9693	.56999	2730.3	6.9489	.53846	2732.9	6.9297	.51032	2735.3	6.9116	.48505
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	.3	-.0001	.0010001	.3	-.0001	.0010001	.3	-.0001	.0010000	.3	-.0001	.0010000
10	42.3	.1510	.0010001	42.3	.1510	.0010001	42.3	.1510	.0010001	42.4	.1510	.0010001
20	84.2	.2962	.0010016	84.2	.2962	.0010016	84.2	.2962	.0010016	84.2	.2962	.0010016
30	126.0	.4364	.0010042	126.0	.4364	.0010042	126.0	.4364	.0010041	126.0	.4364	.0010041
40	167.7	.5720	.0010077	167.7	.5720	.0010077	167.8	.5720	.0010077	167.8	.5720	.0010076
50	209.5	.7034	.0010120	209.5	.7034	.0010120	209.6	.7033	.0010120	209.6	.7033	.0010119
60	251.3	.8308	.0010170	251.4	.8308	.0010170	251.4	.8308	.0010170	251.4	.8308	.0010170
70	293.2	.9546	.0010227	293.2	.9546	.0010227	293.2	.9546	.0010227	293.3	.9546	.0010227
80	335.1	1.0751	.0010291	335.1	1.0751	.0010291	335.2	1.0750	.0010290	335.2	1.0750	.0010290
90	377.1	1.1923	.0010360	377.1	1.1923	.0010360	377.2	1.1923	.0010360	377.2	1.1923	.0010360
100	419.2	1.3067	.0010436	419.2	1.3067	.0010436	419.3	1.3067	.0010436	419.3	1.3067	.0010436
110	461.4	1.4183	.0010518	461.5	1.4183	.0010518	461.5	1.4183	.0010517	461.5	1.4183	.0010517
120	503.8	1.5275	.0010606	503.8	1.5275	.0010605	503.8	1.5274	.0010605	503.8	1.5274	.0010605
130	546.3	1.6343	.0010700	546.4	1.6343	.0010700	546.4	1.6343	.0010700	546.4	1.6343	.0010700
140	2736.9	6.9920	.57689	2735.1	6.9605	.54176	2733.2	6.9305	.51052	589.1	1.7390	.0010800
150	2756.8	7.0442	.59299	2757.1	7.0131	.55702	2755.4	6.9836	.52504	2753.7	6.9554	.49642
160	2780.3	7.0946	.60887	2778.8	7.0638	.57207	2777.3	7.0347	.53935	2775.8	7.0070	.51007
170	2601.6	7.1432	.62457	2800.3	7.1128	.58693	2798.9	7.0840	.55347	2797.5	7.0566	.52352
180	2822.7	7.1903	.64012	2821.5	7.1602	.60164	2820.3	7.1317	.56743	2819.0	7.1046	.53682
190	2843.7	7.2360	.65553	2842.6	7.2062	.61621	2841.4	7.1779	.58126	2840.3	7.1511	.54998
200	2864.5	7.2805	.67084	2863.5	7.2508	.63067	2862.4	7.2228	.59497	2861.4	7.1961	.56302
210	2885.2	7.3238	.68604	2884.2	7.2943	.64503	2883.3	7.2664	.60858	2882.4	7.2400	.57596
220	2905.8	7.3660	.70116	2904.9	7.3367	.65931	2904.1	7.3089	.62211	2903.2	7.2826	.58882
230	2926.3	7.4072	.71621	2925.5	7.3780	.67351	2924.7	7.3504	.63556	2923.9	7.3243	.60160
240	2946.8	7.4475	.73120	2946.1	7.4184	.68765	2945.3	7.3909	.64895	2944.6	7.3649	.61431
250	2967.2	7.4869	.74613	2966.5	7.4579	.70174	2965.9	7.4306	.66228	2965.2	7.4047	.62697
260	2987.6	7.5255	.76101	2987.0	7.4967	.71577	2986.4	7.4694	.67556	2985.7	7.4436	.6395
270	3008.0	7.5634	.77585	3007.4	7.5346	.72977	3006.8	7.5074	.68881	3006.2	7.4817	.65215
280	3028.4	7.6006	.79066	3027.8	7.5719	.74373	3027.3	7.5448	.70201	3026.7	7.5191	.66469
290	3048.8	7.6371	.80544	3048.3	7.6085	.75766	3047.7	7.5814	.71519	3047.2	7.5558	.67719
300	3069.2	7.6730	.82018	3068.7	7.6444	.77156	3068.2	7.6174	.72833	3067.7	7.5918	.68966

TABLE 3 WATER AND STEAM

p(MPa) =	.320			.340			.360			.380		
SAT t(°C)	135.75			137.86			139.86			141.78		
SAT.LIQ	570.9	1.6948	.0010757	579.9	1.7168	.0010779	588.5	1.7376	.0010799	596.8	1.7574	.0010819
SAT.VAP	2727.6	6.9693	.56999	2730.3	6.9489	.53846	2732.9	6.9297	.51032	2735.3	6.9116	.48505
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3089.6	7.7083	.83491	3089.1	7.6798	.78543	3088.7	7.6528	.74145	3088.2	7.6273	.70211
320	3110.0	7.7431	.84961	3109.6	7.7146	.79928	3109.1	7.6876	.75455	3108.7	7.6621	.71453
330	3130.5	7.7773	.86429	3130.1	7.7488	.81312	3129.7	7.7219	.76763	3129.2	7.6965	.72694
340	3151.0	7.8110	.87895	3150.6	7.7825	.82693	3150.2	7.7557	.78070	3149.8	7.7303	.73932
350	3171.5	7.8442	.89360	3171.1	7.8158	.84074	3170.8	7.7890	.79374	3170.4	7.7636	.75170
360	3192.1	7.8770	.90824	3191.7	7.8486	.85452	3191.4	7.8218	.80678	3191.0	7.7964	.76406
370	3212.7	7.9093	.92286	3212.4	7.8809	.86830	3212.0	7.8541	.81980	3211.7	7.8288	.77640
380	3233.4	7.9412	.93747	3233.0	7.9128	.88206	3232.7	7.8861	.83281	3232.4	7.8608	.78874
390	3254.1	7.9726	.95207	3253.8	7.9443	.89581	3253.5	7.9176	.84580	3253.1	7.8923	.80106
400	3274.9	8.0037	.96666	3274.6	7.9754	.90956	3274.2	7.9487	.85879	3273.9	7.9234	.81337
410	3295.7	8.0344	.98125	3295.4	8.0061	.92329	3295.1	7.9795	.87177	3294.8	7.9542	.82568
420	3316.6	8.0648	.99582	3316.3	8.0365	.93702	3316.0	8.0098	.88475	3315.7	7.9846	.83798
430	3337.5	8.0948	1.0104	3337.2	8.0665	.95074	3336.9	8.0398	.89771	3336.7	8.0146	.85027
440	3358.5	8.1244	1.0250	3358.2	8.0962	.96445	3358.0	8.0695	.91067	3357.7	8.0443	.86255
450	3379.5	8.1537	1.0395	3379.3	8.1255	.97816	3379.0	8.0988	.92362	3378.8	8.0736	.87483
460	3400.7	8.1827	1.0541	3400.4	8.1545	.99186	3400.2	8.1279	.93657	3399.9	8.1027	.88710
470	3421.8	8.2114	1.0686	3421.6	8.1832	1.0056	3421.4	8.1566	.94951	3421.1	8.1314	.89937
480	3443.1	8.2398	1.0831	3442.8	8.2116	1.0192	3442.6	8.1850	.96245	3442.4	8.1598	.91163
490	3464.4	8.2679	1.0977	3464.1	8.2397	1.0329	3463.9	8.2131	.97538	3463.7	8.1879	.92389
500	3485.7	8.2957	1.1122	3485.5	8.2675	1.0466	3485.3	8.2409	.98831	3485.1	8.2158	.93614
510	3507.2	8.3232	1.1267	3507.0	8.2951	1.0603	3506.7	8.2685	1.0012	3506.5	8.2433	.94839
520	3528.7	8.3505	1.1412	3528.5	8.3223	1.0740	3528.2	8.2958	1.0141	3528.0	8.2706	.96063
530	3550.2	8.3775	1.1558	3550.0	8.3494	1.0876	3549.8	8.3228	1.0271	3549.6	8.2977	.97287
540	3571.8	8.4043	1.1703	3571.7	8.3761	1.1013	3571.5	8.3496	1.0400	3571.3	8.3244	.98511
550	3593.5	8.4308	1.1848	3593.3	8.4027	1.1150	3593.2	8.3761	1.0529	3593.0	8.3510	.99734
560	3615.3	8.4571	1.1993	3615.1	8.4289	1.1286	3614.9	8.4024	1.0658	3614.7	8.3773	1.0096
570	3637.1	8.4831	1.2138	3636.9	8.4550	1.1423	3636.8	8.4284	1.0787	3636.6	8.4033	1.0218
580	3659.0	8.5089	1.2283	3658.8	8.4808	1.1559	3658.7	8.4543	1.0916	3658.5	8.4292	1.0340
590	3681.0	8.5345	1.2428	3680.8	8.5064	1.1696	3680.6	8.4799	1.1045	3680.5	8.4548	1.0462
600	3703.0	8.5599	1.2573	3702.8	8.5318	1.1832	3702.7	8.5052	1.1174	3702.5	8.4801	1.0585

TABLE 3 WATER AND STEAM

p(MPa) =	.320			.340			= .360			.380		
SAT t(°C)	135.75			137.86			139.86			141.78		
SAT.LIQ	570.9	1.6948	.0010757	579.9	1.7168	.0010779	588.5	1.7376	.0010799	596.8	1.7574	.0010819
SAT.VAP	2727.6	6.9693	.56999	2730.3	6.9489	.53846	2732.9	6.9297	.51032	2735.3	6.9116	.48505
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3725.1	8.5850	1.2718	3724.9	8.5569	1.1969	3724.8	8.5304	1.1303	3724.6	8.5053	1.0707
620	3747.2	8.6100	1.2863	3747.1	8.5819	1.2105	3746.9	8.5554	1.1431	3746.8	8.5303	1.0829
630	3769.5	8.6347	1.3008	3769.3	8.6066	1.2241	3769.2	8.5801	1.1560	3769.0	8.5550	1.0951
640	3791.7	8.6593	1.3152	3791.6	8.6312	1.2378	3791.5	8.6047	1.1689	3791.3	8.5796	1.1073
650	3814.1	8.6836	1.3297	3814.0	8.6555	1.2514	3813.8	8.6290	1.1818	3813.7	8.6040	1.1195
660	3836.5	8.7078	1.3442	3836.4	8.6797	1.2650	3836.3	8.6532	1.1947	3836.1	8.6281	1.1317
670	3859.0	8.7318	1.3587	3858.9	8.7037	1.2787	3858.7	8.6772	1.2075	3858.6	8.6521	1.1439
680	3881.6	8.7555	1.3732	3881.4	8.7275	1.2923	3881.3	8.7010	1.2204	3881.2	8.6759	1.1561
690	3904.2	8.7791	1.3876	3904.1	8.7511	1.3059	3903.9	8.7246	1.2333	3903.8	8.6995	1.1683
700	3926.9	8.8026	1.4021	3926.8	8.7745	1.3195	3926.6	8.7480	1.2462	3926.5	8.7230	1.1805
710	3949.6	8.8258	1.4166	3949.5	8.7978	1.3332	3949.4	8.7713	1.2590	3949.3	8.7462	1.1927
720	3972.4	8.8489	1.4310	3972.3	8.8209	1.3468	3972.2	8.7944	1.2719	3972.1	8.7693	1.2049
730	3995.3	8.8719	1.4455	3995.2	8.8438	1.3604	3995.1	8.8173	1.2848	3995.0	8.7923	1.2171
740	4018.3	8.8946	1.4600	4018.2	8.8665	1.3740	4018.0	8.8401	1.2976	4017.9	8.8150	1.2293
750	4041.3	8.9172	1.4744	4041.2	8.8891	1.3876	4041.1	8.8627	1.3105	4041.0	8.8376	1.2415
760	4064.3	8.9396	1.4889	4064.2	8.9116	1.4013	4064.1	8.8851	1.3233	4064.0	8.8601	1.2536
770	4087.5	8.9619	1.5034	4087.4	8.9339	1.4149	4087.3	8.9074	1.3362	4087.2	8.8824	1.2658
780	4110.7	8.9841	1.5178	4110.6	8.9560	1.4285	4110.5	8.9296	1.3491	4110.4	8.9045	1.2780
790	4133.9	9.0060	1.5323	4133.8	8.9780	1.4421	4133.7	8.9515	1.3619	4133.6	8.9265	1.2902
800	4157.2	9.0279	1.5467	4157.2	8.9998	1.4557	4157.1	8.9734	1.3748	4157.0	8.9483	1.3024

TABLE 3 WATER AND STEAM

p(MPa) =	.400			.420			.440			.460		
SAT t(°C)	143.62			145.39			147.09			148.73		
SAT.LIQ	604.7	1.7764	.0010839	612.3	1.7945	.0010858	619.6	1.8120	.0010876	626.7	1.8287	.0010894
SAT.VAP	2737.6	6.8943	.46222	2739.8	6.8779	.44150	2741.9	6.8623	.42260	2743.9	6.8473	.40528
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	.4	-.0001	.0010000	.4	-.0001	.0010000	.4	-.0001	.0010000	.4	-.0001	.0010000
10	42.4	.1510	.0010001	42.4	.1510	.0010001	42.4	.1510	.0010000	42.4	.1509	.0010000
20	84.2	.2962	.0010015	84.3	.2962	.0010015	84.3	.2962	.0010015	84.3	.2962	.0010015
30	126.0	.4364	.0010041	126.0	.4364	.0010041	126.1	.4364	.0010041	126.1	.4364	.0010041
40	167.8	.5720	.0010076	167.8	.5720	.0010076	167.8	.5720	.0010076	167.9	.5719	.0010076
50	209.6	.7033	.0010119	209.6	.7033	.0010119	209.6	.7033	.0010119	209.6	.7033	.0010119
60	251.4	.8308	.0010170	251.4	.8308	.0010170	251.4	.8308	.0010170	251.5	.8308	.0010169
70	293.3	.9546	.0010227	293.3	.9546	.0010227	293.3	.9546	.0010227	293.3	.9546	.0010226
80	335.2	1.0750	.0010290	335.2	1.0750	.0010290	335.2	1.0750	.0010290	335.2	1.0750	.0010290
90	377.2	1.1923	.0010360	377.2	1.1923	.0010360	377.2	1.1923	.0010360	377.2	1.1922	.0010360
100	419.3	1.3066	.0010436	419.3	1.3066	.0010435	419.3	1.3066	.0010435	419.3	1.3066	.0010435
110	461.5	1.4183	.0010517	461.5	1.4183	.0010517	461.5	1.4182	.0010517	461.5	1.4182	.0010517
120	503.9	1.5274	.0010605	503.9	1.5274	.0010605	503.9	1.5274	.0010605	503.9	1.5274	.0010605
130	546.4	1.6342	.0010699	546.4	1.6342	.0010699	546.4	1.6342	.0010699	546.4	1.6342	.0010699
140	589.1	1.7389	.0010800	589.1	1.7389	.0010800	589.2	1.7389	.0010800	589.2	1.7389	.0010800
150	2752.0	6.9285	.47066	2750.3	6.9028	.44734	2748.5	6.8780	.42614	2746.8	6.8542	.40677
160	2774.2	6.9805	.48371	2772.7	6.9551	.45985	2771.1	6.9308	.43816	2769.5	6.9074	.41835
170	2796.1	7.0305	.49657	2794.7	7.0055	.47217	2793.3	6.9815	.44999	2791.9	6.9585	.42974
180	2817.8	7.0788	.50926	2816.5	7.0541	.48433	2815.2	7.0304	.46166	2814.0	7.0077	.44096
190	2839.2	7.1255	.52182	2838.0	7.1010	.49635	2836.9	7.0776	.47318	2835.7	7.0552	.45203
200	2860.4	7.1708	.53426	2859.3	7.1466	.50824	2858.3	7.1234	.48459	2857.2	7.1011	.46298
210	2881.4	7.2148	.54660	2880.5	7.1908	.52004	2879.5	7.1678	.49589	2878.6	7.1457	.47383
220	2902.3	7.2576	.55885	2901.5	7.2338	.53174	2900.6	7.2109	.50709	2899.7	7.1891	.48459
230	2923.1	7.2994	.57103	2922.3	7.2757	.54337	2921.5	7.2530	.51823	2920.7	7.2312	.49527
240	2943.9	7.3402	.58314	2943.1	7.3166	.55494	2942.4	7.2940	.52930	2941.6	7.2724	.50588
250	2964.5	7.3800	.59519	2963.8	7.3565	.56644	2963.1	7.3340	.54030	2962.4	7.3125	.51644
260	2985.1	7.4190	.60720	2984.5	7.3956	.57790	2983.8	7.3732	.55127	2983.2	7.3518	.52694
270	3005.6	7.4572	.61916	3005.1	7.4339	.58932	3004.5	7.4116	.56218	3003.9	7.3902	.53741
280	3026.2	7.4947	.63109	3025.6	7.4714	.60070	3025.1	7.4492	.57306	3024.5	7.4279	.54783
290	3046.7	7.5314	.64298	3046.2	7.5082	.61204	3045.7	7.4861	.58391	3045.1	7.4649	.55822
300	3067.2	7.5675	.65485	3066.7	7.5444	.62336	3066.2	7.5223	.59473	3065.7	7.5011	.56859

TABLE 3 WATER AND STEAM

p(MPa),	.400			.420			.440			.460		
SAT t(°C)	143.62			145.39			147.09			148.73		
SAT.LIQ	604.7	1.7764	.0010839	612.3	1.7945	.0010858	619.6	1.8120	.0010876	626.7	1.8287	.0010894
SAT.VAP	2737.6	6.8943	.46222	2739.8	6.8779	.44150	2741.9	6.8623	.42260	2743.9	6.8473	.40528
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3087.7	7.6030	.66669	3087.3	7.5799	.63465	3086.8	7.5579	.60552	3086.3	7.5368	.57892
320	3108.3	7.6379	.67851	3107.8	7.6149	.64592	3107.4	7.5929	.61629	3107.0	7.5718	.58924
330	3128.8	7.6723	.69031	3128.4	7.6493	.65717	3128.0	7.6273	.62704	3127.6	7.6063	.59953
340	3149.4	7.7061	.70209	3149.0	7.6831	.66840	3148.6	7.6612	.63777	3148.2	7.6402	.60981
350	3170.0	7.7395	.71385	3169.6	7.7165	.67962	3169.2	7.6946	.64849	3168.9	7.6736	.62007
360	3190.6	7.7723	.72561	3190.3	7.7494	.69082	3189.9	7.7275	.65919	3189.6	7.7066	.63032
370	3211.3	7.8047	.73735	3211.0	7.7818	.70201	3210.6	7.7600	.66988	3210.3	7.7391	.64055
380	3232.1	7.8367	.74907	3231.7	7.8138	.71319	3231.4	7.7920	.68056	3231.1	7.7711	.65078
390	3252.8	7.8683	.76079	3252.5	7.8454	.72435	3252.2	7.8236	.69123	3251.9	7.8027	.66099
400	3273.6	7.8994	.77250	3273.3	7.8766	.73551	3273.0	7.8548	.70189	3272.7	7.8339	.67119
410	3294.5	7.9302	.78420	3294.2	7.9074	.74666	3293.9	7.8856	.71254	3293.6	7.8648	.68139
420	3315.4	7.9606	.79589	3315.1	7.9378	.75780	3314.9	7.9160	.72318	3314.6	7.8952	.69157
430	3336.4	7.9906	.80757	3336.1	7.9678	.76894	3335.9	7.9461	.73382	3335.6	7.9253	.70175
440	3357.4	8.0203	.81925	3357.2	7.9976	.78007	3356.9	7.9758	.74445	3356.6	7.9550	.71192
450	3378.5	8.0497	.83092	3378.3	8.0269	.79119	3378.0	8.0052	.75507	3377.7	7.9844	.72209
460	3399.7	8.0787	.84258	3399.4	8.0560	.80230	3399.2	8.0343	.76568	3398.9	8.0135	.73225
470	3420.9	8.1075	.85424	3420.6	8.0847	.81341	3420.4	8.0630	.77629	3420.2	8.0423	.74240
480	3442.1	8.1359	.86590	3441.9	8.1132	.82452	3441.7	8.0915	.78690	3441.4	8.0707	.75255
490	3463.5	8.1640	.87755	3463.2	8.1413	.83562	3463.0	8.1196	.79750	3462.8	8.0989	.76270
500	3484.9	8.1919	.88919	3484.6	8.1692	.84671	3484.4	8.1475	.80810	3484.2	8.1268	.77284
510	3506.3	8.2195	.90083	3506.1	8.1967	.85780	3505.9	8.1751	.81869	3505.7	8.1544	.78297
520	3527.8	8.2468	.91247	3527.6	8.2241	.86889	3527.4	8.2024	.82927	3527.2	8.1817	.79310
530	3549.4	8.2738	.92410	3549.2	8.2511	.87997	3549.0	8.2294	.83986	3548.8	8.2087	.80323
540	3571.1	8.3006	.93573	3570.9	8.2779	.89105	3570.7	8.2563	.85044	3570.5	8.2356	.81335
550	3592.8	8.3271	.94735	3592.6	8.3044	.90213	3592.4	8.2828	.86101	3592.2	8.2621	.82348
560	3614.6	8.3534	.95897	3614.4	8.3307	.91320	3614.2	8.3091	.87159	3614.0	8.2884	.83359
570	3636.4	8.3795	.97059	3636.2	8.3568	.92427	3636.0	8.3352	.88216	3635.9	8.3145	.84371
580	3658.3	8.4053	.98221	3658.1	8.3827	.93534	3658.0	8.3610	.89272	3657.8	8.3404	.85382
590	3680.3	8.4309	.99382	3680.1	8.4083	.94640	3680.0	8.3867	.90329	3679.8	8.3660	.86393
600	3702.3	8.4563	1.0054	3702.2	8.4337	.95746	3702.0	8.4121	.91385	3701.8	8.3914	.87403

TABLE 3 WATER AND STEAM

p(MPa)	.400			.420			.440			.460		
SAT t(°C)	143.62			145.39			147.09			148.73		
SAT.LIQ	604.7	1.7744	.0010839	612.3	1.7945	.0010858	619.6	1.8120	.0010876	626.7	1.8287	.0010894
SAT.VAP	2737.6	6.8943	.46222	2739.8	6.8779	.44150	2741.9	6.8623	.42260	2743.9	6.8473	.40599
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3724.4	8.4815	1.0170	3724.3	8.4588	.96852	3724.1	8.4372	.92441	3724.0	8.4166	.88413
620	3746.6	8.5065	1.0286	3746.5	8.4838	.97957	3746.3	8.4622	.93496	3746.2	8.4416	.89423
630	3768.9	8.5312	1.0402	3768.7	8.5086	.99063	3768.6	8.4870	.94552	3768.4	8.4664	.90433
640	3791.2	8.5558	1.0518	3791.0	8.5332	1.0017	3790.9	8.5116	.95607	3790.7	8.4909	.91443
650	3813.5	8.5802	1.0634	3813.4	8.5575	1.0127	3813.3	8.5359	.96662	3813.1	8.5153	.92452
660	3836.0	8.6043	1.0750	3835.8	8.5817	1.0238	3835.7	8.5601	.97717	3835.6	8.5395	.93461
670	3858.5	8.6283	1.0866	3858.3	8.6057	1.0348	3858.2	8.5841	.98771	3858.1	8.5635	.94470
680	3881.0	8.6521	1.0982	3880.9	8.6295	1.0459	3880.8	8.6079	.99825	3880.7	8.5873	.95479
690	3903.7	8.6758	1.1098	3903.6	8.6531	1.0569	3903.4	8.6316	1.0088	3903.3	8.6109	.96487
700	3926.4	8.6992	1.1214	3926.3	8.6766	1.0679	3926.1	8.6550	1.0193	3926.0	8.6344	.97495
710	3949.1	8.7225	1.1330	3949.0	8.6999	1.0790	3948.9	8.6783	1.0299	3948.8	8.6577	.98504
720	3972.0	8.7456	1.1446	3971.9	8.7230	1.0900	3971.7	8.7014	1.0404	3971.6	8.6808	.99512
730	3994.9	8.7685	1.1562	3994.8	8.7459	1.1010	3994.6	8.7243	1.0509	3994.5	8.7037	1.0052
740	4017.8	8.7913	1.1677	4017.7	8.7687	1.1121	4017.6	8.7471	1.0615	4017.5	8.7265	1.0153
750	4040.8	8.8139	1.1793	4040.7	8.7913	1.1231	4040.6	8.7697	1.0720	4040.5	8.7491	1.0253
760	4063.9	8.8363	1.1909	4063.8	8.8137	1.1341	4063.7	8.7922	1.0825	4063.6	8.7716	1.0354
770	4087.1	8.8586	1.2025	4087.0	8.8360	1.1452	4086.9	8.8145	1.0931	4086.8	8.7939	1.0455
780	4110.3	8.8808	1.2141	4110.2	8.8582	1.1562	4110.1	8.8366	1.1036	4110.0	8.8161	1.0556
790	4133.5	8.9028	1.2256	4133.4	8.8802	1.1672	4133.4	8.8586	1.1141	4133.3	8.8381	1.0656
800	4156.9	8.9246	1.2372	4156.8	8.9020	1.1782	4156.7	8.8805	1.1246	4156.6	8.8599	1.0757

TABLE 3 WATER AND STEAM

p(MPa) =	.480			.500			.550			.600		
SAT (°C)	150.31			151.84			155.47			158.84		
SAT.LIQ	633.5	1.8448	.0010911	640.1	1.8604	.0010928	655.8	1.8970	.0010969	670.4	1.9308	.0011009
SAT.VAP	2745.7	6.8330	.38936	2747.5	6.8192	.37468	2751.7	6.7870	.34248	2755.5	6.7575	.31547
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	.4	-.0001	.0010000	.5	-.0001	.0010000	.5	-.0001	.0009999	.6	-.0001	.0009999
10	42.5	.1509	.0010000	42.5	.1509	.0010000	42.5	.1509	.0010000	42.6	.1509	.0010000
20	84.3	.2962	.0010015	84.3	.2962	.0010015	84.4	.2962	.0010015	84.4	.2962	.0010015
30	126.1	.4364	.0010041	126.1	.4364	.0010041	126.2	.4363	.0010041	126.2	.4363	.0010040
40	167.9	.5719	.0010076	167.9	.5719	.0010076	167.9	.5719	.0010076	168.0	.5719	.0010075
50	209.7	.7033	.0010119	209.7	.7033	.0010119	209.7	.7033	.0010119	209.8	.7032	.0010119
60	251.5	.8307	.0010169	251.5	.8307	.0010169	251.5	.8307	.0010169	251.6	.8307	.0010169
70	293.3	.9545	.0010226	293.4	.9545	.0010226	293.4	.9545	.0010226	293.4	.9545	.0010226
80	335.3	1.0750	.0010290	335.3	1.0750	.0010290	335.3	1.0749	.0010289	335.4	1.0749	.0010289
90	377.3	1.1922	.0010359	377.3	1.1922	.0010359	377.3	1.1922	.0010359	377.3	1.1921	.0010359
100	419.3	1.3066	.0010435	419.4	1.3066	.0010435	419.4	1.3065	.0010435	419.4	1.3065	.0010434
110	461.6	1.4182	.0010517	461.6	1.4182	.0010517	461.6	1.4181	.0010516	461.6	1.4181	.0010516
120	503.9	1.5273	.0010605	503.9	1.5273	.0010605	504.0	1.5273	.0010604	504.0	1.5272	.0010604
130	546.4	1.6342	.0010699	546.5	1.6341	.0010699	546.5	1.6341	.0010699	546.5	1.6340	.0010698
140	589.2	1.7389	.0010800	589.2	1.7388	.0010800	589.2	1.7388	.0010799	589.3	1.7387	.0010799
150	632.2	1.8416	.0010908	632.2	1.8416	.0010908	632.2	1.8416	.0010907	632.2	1.8415	.0010907
160	2768.0	6.8849	.40019	2766.4	6.8631	.38347	2762.3	6.8117	.34698	2758.2	6.7640	.31655
170	2790.5	6.9363	.41117	2789.1	6.9149	.39408	2785.4	6.8644	.35677	2781.8	6.8177	.32567
180	2812.7	6.9858	.42198	2811.4	6.9647	.40451	2808.1	6.9151	.36639	2804.8	6.8691	.33461
190	2834.6	7.0336	.43264	2833.4	7.0127	.41480	2830.5	6.9638	.37586	2827.5	6.9185	.34339
200	2856.2	7.0798	.44318	2855.1	7.0592	.42496	2852.5	7.0108	.38519	2849.7	6.9662	.35204
210	2877.6	7.1245	.45361	2876.6	7.1042	.43501	2874.2	7.0563	.39442	2871.7	7.0121	.36058
220	2898.8	7.1680	.46396	2898.0	7.1478	.44497	2895.7	7.1004	.40355	2893.5	7.0567	.36903
230	2919.9	7.2104	.47422	2919.1	7.1903	.45486	2917.1	7.1432	.41260	2915.0	7.0999	.37739
240	2940.9	7.2516	.48442	2940.1	7.2317	.46467	2938.3	7.1849	.42159	2936.4	7.1419	.38568
250	2961.8	7.2919	.49456	2961.1	7.2721	.47443	2959.3	7.2256	.43051	2957.6	7.1829	.39391
260	2982.5	7.3313	.50465	2981.9	7.3115	.48414	2980.3	7.2653	.43938	2978.7	7.2228	.40208
270	3003.3	7.3698	.51470	3002.7	7.3501	.49380	3001.2	7.3041	.44821	2999.7	7.2618	.41021
280	3024.0	7.4075	.52470	3023.4	7.3879	.50343	3022.0	7.3421	.45700	3020.6	7.3000	.41831
290	3044.6	7.4445	.53468	3044.1	7.4250	.51302	3042.8	7.3793	.46575	3041.5	7.3374	.42636
300	3065.2	7.4809	.54462	3064.8	7.4614	.52258	3063.5	7.4158	.47448	3062.3	7.3740	.43439

TABLE 3 WATER AND STEAM

p(MPa) =	.480			.500			= .550			.600		
SAT t(°C)	150.31			151.84			155.47			158.84		
SAT.LIQ	633.5	1.8448	.0010911	640.1	1.8604	.0010928	655.8	1.8970	.0010969	670.4	1.9308	.0011009
SAT.VAP	2745.7	6.8330	.38936	2747.5	6.8192	.37468	2751.7	6.7870	.34248	2755.5	6.7575	.31547
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3085.9	7.5165	.55454	3085.4	7.4971	.53211	3084.2	7.4517	.48317	3083.1	7.4100	.44239
320	3106.5	7.5516	.56444	3106.1	7.5322	.54163	3105.0	7.4869	.49185	3103.9	7.4454	.45037
330	3127.2	7.5861	.57432	3126.7	7.5668	.55112	3125.7	7.5215	.50051	3124.6	7.4801	.45832
340	3147.8	7.6201	.58418	3147.4	7.6008	.56060	3146.4	7.5556	.50914	3145.4	7.5143	.46626
350	3168.5	7.6536	.59402	3168.1	7.6343	.57005	3167.2	7.5892	.51776	3166.2	7.5479	.47419
360	3189.2	7.6865	.60385	3188.8	7.6673	.57950	3187.9	7.6222	.52637	3187.0	7.5810	.48209
370	3209.9	7.7190	.61367	3209.6	7.6998	.58893	3208.7	7.6548	.53496	3207.9	7.6137	.48999
380	3230.7	7.7511	.62347	3230.4	7.7319	.59835	3229.6	7.6870	.54354	3228.7	7.6459	.49787
390	3251.5	7.7827	.63327	3251.2	7.7635	.60776	3250.4	7.7187	.55212	3249.6	7.6776	.50574
400	3272.4	7.8140	.64305	3272.1	7.7948	.61716	3271.3	7.7500	.56068	3270.6	7.7090	.51361
410	3293.3	7.8448	.65283	3293.0	7.8256	.62655	3292.3	7.7809	.56923	3291.6	7.7399	.52146
420	3314.3	7.8753	.66260	3314.0	7.8561	.63594	3313.3	7.8114	.57777	3312.6	7.7705	.52931
430	3335.3	7.9054	.67236	3335.0	7.8862	.64531	3334.3	7.8415	.58631	3333.7	7.8007	.53714
440	3356.4	7.9351	.68211	3356.1	7.9160	.65468	3355.4	7.8713	.59484	3354.8	7.8305	.54497
450	3377.5	7.9645	.69186	3377.2	7.9454	.66405	3376.6	7.9008	.60337	3376.0	7.8600	.55280
460	3398.7	7.9936	.70160	3398.4	7.9745	.67340	3397.8	7.9299	.61188	3397.2	7.8891	.56062
470	3419.9	8.0224	.71134	3419.7	8.0033	.68276	3419.1	7.9587	.62040	3418.5	7.9180	.56843
480	3441.2	8.0509	.72107	3441.0	8.0318	.69210	3440.4	7.9872	.62891	3439.8	7.9465	.57624
490	3462.6	8.0790	.73079	3462.3	8.0600	.70144	3461.8	8.0154	.63741	3461.2	7.9747	.58404
500	3484.0	8.1069	.74052	3483.8	8.0879	.71078	3483.2	8.0433	.64591	3482.7	8.0027	.59184
510	3505.5	8.1345	.75023	3505.3	8.1155	.72011	3504.7	8.0710	.65440	3504.2	8.0303	.59964
520	3527.0	8.1618	.75995	3526.8	8.1428	.72944	3526.3	8.0983	.66289	3525.8	8.0577	.60743
530	3548.6	8.1889	.76966	3548.4	8.1699	.73877	3547.9	8.1254	.67138	3547.4	8.0848	.61521
540	3570.3	8.2157	.77936	3570.1	8.1967	.74809	3569.6	8.1523	.67986	3569.1	8.1117	.62300
550	3592.0	8.2423	.78906	3591.8	8.2233	.75741	3591.4	8.1789	.68834	3590.9	8.1383	.63078
560	3613.8	8.2686	.79876	3613.6	8.2496	.76672	3613.2	8.2052	.69681	3612.7	8.1647	.63855
570	3635.7	8.2947	.80846	3635.5	8.2757	.77603	3635.1	8.2313	.70528	3634.6	8.1908	.64633
580	3657.6	8.3206	.81815	3657.4	8.3016	.78534	3657.0	8.2572	.71375	3656.6	8.2167	.65410
590	3679.6	8.3462	.82784	3679.4	8.3272	.79465	3679.0	8.2829	.72222	3678.6	8.2423	.66186
600	3701.7	8.3716	.83753	3701.5	8.3526	.80395	3701.1	8.3083	.73068	3700.7	8.2678	.66963

TABLE 3 WATER AND STEAM

p(MPa) =	.480			.500			.550			.600		
SAT t(°C)	150.31			151.84			155.47			158.84		
SAT.LIQ	633.5	1.8448	.0010911	640.1	1.8604	.0010928	655.8	1.8970	.0010969	670.4	1.9308	.0011009
SAT.VAP	2745.7	6.8330	.38936	2747.5	6.8192	.37468	2751.7	6.7870	.34248	2755.5	6.7575	.31547
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3723.8	8.3968	.84721	3723.6	8.3778	.81325	3723.2	8.3335	.73914	3722.8	8.2930	.67739
620	3746.0	8.4218	.85690	3745.8	8.4028	.82255	3745.5	8.3585	.74760	3745.1	8.3180	.68515
630	3768.3	8.4466	.86658	3768.1	8.4276	.83184	3767.7	8.3833	.75606	3767.3	8.3428	.69290
64	3790.6	8.4712	.87625	3790.4	8.4522	.84113	3790.1	8.4079	.76451	3789.7	8.3674	.70066
650	3813.0	8.4955	.88593	3812.8	8.4766	.85042	3812.5	8.4323	.77296	3812.1	8.3919	.70841
660	3835.4	8.5197	.89560	3835.3	8.5008	.85971	3834.9	8.4565	.78141	3834.6	8.4161	.71616
670	3857.9	8.5437	.90527	3857.8	8.5248	.86900	3857.5	8.4805	.78986	3857.1	8.4401	.72391
680	3880.5	8.5676	.91494	3880.4	8.5486	.87828	3880.1	8.5044	.79830	3879.7	8.4639	.73165
690	3903.2	8.5912	.92461	3903.0	8.5723	.88757	3902.7	8.5280	.80675	3902.4	8.4876	. 940
700	3925.9	8.6147	.93427	3925.8	8.5957	.89685	3925.5	8.5515	.81519	3925.1	8.5111	. 714
710	3948.7	8.6380	.94394	3948.5	8.6190	.90613	3948.2	8.5748	.82363	3947.9	8.5344	.75488
720	3971.5	8.6611	.95360	3971.4	8.6421	.91540	3971.1	8.5979	.83207	3970.8	8.5575	.76262
730	3994.4	8.6840	.96326	3994.3	8.6651	.92468	3994.0	8.6209	.84050	3993.7	8.5805	.77036
740	4017.4	8.7068	.97292	4017.3	8.6879	.93395	4017.0	8.6437	.84894	4016.7	8.6033	.77809
750	4040.4	8.7294	.98257	4040.3	8.7105	.94322	4040.0	8.6663	.85737	4039.8	8.6259	.78583
760	4063.5	8.7519	.99223	4063.4	8.7330	.95249	4063.1	8.6888	.86580	4062.9	8.6484	.79356
770	4086.7	8.7742	1.0019	4086.6	8.7553	.96176	4086.3	8.7111	.87423	4086.1	8.6707	.80129
780	4109.9	8.7963	1.0115	4109.8	8.7774	.97103	4109.5	8.7333	.88266	4109.3	8.6929	.80902
790	4133.2	8.8183	1.0212	4133.1	8.7994	.98030	4132.8	8.7553	.89109	4132.6	8.7149	.81675
800	4156.5	8.8402	1.0308	4156.4	8.8213	.98956	4156.2	8.7771	.89952	4155.9	8.7368	.82447

TABLE 3 WATER AND STEAM

p(MPa)	.650			.700			.750			.800		
SAT t(°C)	161.99			164.96			167.76			170.41		
SAT.LIQ	684.1	1.9623	.0011046	697.1	1.9918	.0011082	709.3	2.0195	.0011116	720.9	2.0457	.0011150
SAT.VAP	2758.9	6.7304	.29249	2762.0	6.7052	.27268	2764.8	6.6817	.25543	2767.5	6.6596	.24026
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	.6	.0001	.0009999	.7	.0001	.0009999	.7	-.0001	.0009998	.8	-.0001	.0009998
10	42.6	.1509	.0009999	42.7	.1509	.0009999	42.7	.1509	.0009999	42.8	.1509	.0009999
20	84.5	.2962	.0010014	84.5	.2962	.0010014	84.6	.2961	.0010014	84.6	.2961	.0010014
30	126.3	.4363	.0010040	126.3	.4363	.0010040	126.3	.4363	.0010040	126.4	.4363	.0010040
40	168.0	.5719	.0010075	168.1	.5719	.0010075	168.1	.5718	.0010075	168.2	.5718	.0010075
50	209.8	.7032	.0010118	209.8	.7032	.0010118	209.9	.7032	.0010118	209.9	.7031	.0010118
60	251.6	.8306	.0010169	251.7	.8306	.0010168	251.7	.8306	.0010168	251.7	.8306	.0010168
70	293.5	.9544	.0010226	293.5	.9544	.0010225	293.6	.9544	.0010225	293.6	.9544	.0010225
80	335.4	1.0749	.0010289	335.4	1.0748	.0010289	335.5	1.0748	.0010289	335.5	1.0748	.0010288
90	377.4	1.1921	.0010359	377.4	1.1921	.0010358	377.5	1.1920	.0010358	377.5	1.1920	.0010358
100	419.5	1.3064	.0010434	419.5	1.3064	.0010434	419.6	1.3064	.0010434	419.6	1.3063	.0010433
110	461.7	1.4181	.0010516	461.7	1.4180	.0010516	461.8	1.4180	.0010515	461.8	1.4179	.0010515
120	504.0	1.5272	.0010604	504.1	1.5271	.0010603	504.1	1.5271	.0010603	504.1	1.5270	.0010603
130	546.6	1.6340	.0010698	546.6	1.6339	.0010698	546.6	1.6339	.0010697	546.7	1.6338	.0010697
140	589.3	1.7387	.0010799	589.3	1.7386	.0010798	589.4	1.7386	.0010798	589.4	1.7385	.0010798
150	632.3	1.8414	.0010907	632.3	1.8414	.0010906	632.3	1.8413	.0010906	632.4	1.8413	.0010906
160	675.5	1.9424	.0011022	675.5	1.9424	.0011022	675.6	1.9423	.0011021	675.6	1.9423	.0011021
170	2778.0	6.7740	.29933	2774.2	6.7330	.27673	2770.4	6.6941	.25713	719.1	2.0416	.0011144
180	2801.5	6.8263	.30770	2798.0	6.7861	.28461	2794.6	6.7482	.26459	2791.1	6.7122	.24706
190	2824.4	6.8764	.31591	2821.4	6.8370	.29234	2818.2	6.7998	.27190	2815.1	6.7647	.25400
200	2847.0	6.9247	.32398	2844.2	6.8859	.29992	2841.4	6.8494	.27905	2838.6	6.8148	.26079
210	2869.2	6.9712	.33194	2866.7	6.9329	.30738	2864.2	6.8970	.28609	2861.6	6.8630	.26746
220	2891.2	7.0162	.33980	2888.9	6.9784	.31475	2886.6	6.9429	.29303	2884.2	6.9094	.27402
230	2912.9	7.0598	.34758	2910.8	7.0224	.32203	2908.7	6.9873	.29988	2906.6	6.9542	.28049
240	2934.4	7.1021	.35529	2932.5	7.0651	.32923	2930.6	7.0303	.30665	2928.6	6.9976	.28688
250	2955.8	7.1434	.36293	2954.0	7.1066	.33637	2952.2	7.0721	.31336	2950.4	7.0397	.29321
260	2977.0	7.1835	.37052	2975.4	7.1470	.34346	2973.7	7.1128	.32001	2972.1	7.0807	.29948
270	2998.1	7.2228	.37806	2996.6	7.1865	.35050	2995.1	7.1525	.32661	2993.5	7.1205	.30571
280	3019.2	7.2611	.38556	3017.7	7.2250	.35750	3016.3	7.1912	.33317	3014.9	7.1595	.31189
290	3040.1	7.2987	.39303	3038.8	7.2627	.36446	3037.4	7.2291	.33970	3036.1	7.1975	.31803
300	3061.0	7.3355	.40047	3059.8	7.2997	.37139	3058.5	7.2662	.34619	3057.3	7.2348	.32414

TABLE 3 WATER AND STEAM

p(MPa) =	.650			.700			.750			= .800		
SAT t(°C)	161.99			164.96			167.76			170.41		
SAT.LIQ	684.1	1.9623	.0011046	697.1	1.9918	.0011082	709.3	2.0195	.0011116	720.9	2.0457	.0011150
SAT.VAP	2758.9	6.7304	.29249	2762.0	6.7052	.27268	2764.8	6.6817	.25543	2767.5	6.6596	.24026
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3081.9	7.3716	.40788	3080.7	7.3359	.37830	3079.5	7.3026	.35266	3078.3	7.2713	.33023
320	3102.8	7.4070	.41527	3101.6	7.3715	.38518	3100.5	7.3382	.35910	3099.4	7.3070	.33629
330	3123.6	7.4419	.42263	3122.5	7.4064	.39204	3121.5	7.3733	.36552	3120.4	7.3422	.34232
340	3144.4	7.4761	.42998	3143.4	7.4407	.39888	3142.4	7.4077	.37193	3141.4	7.3767	.34834
350	3165.3	7.5099	.43731	3164.3	7.4745	.40571	3163.4	7.4416	.37831	3162.4	7.4107	.35434
360	3186.1	7.5431	.44463	3185.2	7.5078	.41252	3184.3	7.4749	.38468	3183.4	7.4441	.36033
370	3207.0	7.5758	.45193	3206.1	7.5406	.41931	3205.3	7.5078	.39104	3204.4	7.4770	.36631
380	3227.9	7.6080	.45922	3227.1	7.5729	.42610	3226.2	7.5401	.39739	3225.4	7.5094	.37227
390	3248.8	7.6398	.46650	3248.0	7.6047	.43287	3247.2	7.5720	.40372	3246.4	7.5414	.37822
400	3269.8	7.6712	.47378	3269.0	7.6362	.43964	3268.3	7.6035	.41005	3267.5	7.5729	.38416
410	3290.8	7.7022	.48104	3290.1	7.6672	.44639	3289.3	7.6346	.41636	3288.6	7.6040	.39009
420	3311.9	7.7328	.48829	3311.2	7.6978	.45314	3310.4	7.6652	.42267	3309.7	7.6347	.39601
430	3333.0	7.7630	.49554	3332.3	7.7281	.45988	3331.6	7.6955	.42897	3330.9	7.6650	.40193
440	3354.1	7.7929	.50278	3353.4	7.7580	.46661	3352.8	7.7255	.43527	3352.1	7.6950	.40784
450	3375.3	7.8224	.51001	3374.7	7.7875	.47334	3374.0	7.7550	.44155	3373.4	7.7246	.41374
460	3396.6	7.8516	.51724	3395.9	7.8168	.48006	3395.3	7.7843	.44783	3394.7	7.7539	.41964
470	3417.9	7.8804	.52446	3417.3	7.8456	.48677	3416.7	7.8132	.45411	3416.1	7.7828	.42553
480	3439.2	7.9090	.53168	3438.6	7.8742	.49348	3438.1	7.8418	.46038	3437.5	7.8115	.43141
490	3460.6	7.9372	.53889	3460.1	7.9025	.50019	3459.5	7.8701	.46664	3459.0	7.8398	.43729
500	3482.1	7.9652	.54610	3481.6	7.9305	.50689	3481.0	7.8981	.47290	3480.5	7.8678	.44317
510	3503.7	7.9929	.55330	3503.1	7.9582	.51358	3502.6	7.9258	.47916	3502.1	7.8955	.44904
520	3525.3	8.0203	.56050	3524.7	7.9856	.52027	3524.2	7.9533	.48541	3523.7	7.9230	.45491
530	3546.9	8.0474	.56769	3546.4	8.0128	.52696	3545.9	7.9804	.49166	3545.4	7.9502	.46077
540	3568.6	8.0743	.57488	3568.1	8.0396	.53365	3567.7	8.0074	.49791	3567.2	7.9771	.46663
550	3590.4	8.1009	.58207	3589.9	8.0663	.54033	3589.5	8.0340	.50415	3589.0	8.0038	.47249
560	3612.3	8.1273	.58926	3611.8	8.0927	.54700	3611.3	8.0604	.51038	3610.9	8.0302	.47834
570	3634.2	8.1534	.59644	3633.7	8.1188	.55368	3633.3	8.0866	.51662	3632.8	8.0564	.48419
580	3656.1	8.1793	.60362	3655.7	8.1448	.56035	3655.3	8.1125	.52285	3654.8	8.0824	.49004
590	3678.2	8.2050	.61079	3677.8	8.1705	.56702	3677.3	8.1382	.52908	3676.9	8.1081	.49588
600	3700.3	8.2305	.61796	3699.9	8.1959	.57368	3699.5	8.1637	.53530	3699.1	8.1336	.50172

TABLE 3 WATER AND STEAM

p(MPa) =	.650			.700			.750			.800		
SAT t(°C)	161.99			164.96			167.76			170.41		
SAT.LIQ	684.1	1.9623	.0011046	697.1	1.9918	.0011082	709.3	2.0195	.0011116	720.9	2.0457	.0011150
SAT.VAP	2758.9	6.7304	.29249	2762.0	6.7052	.27268	2764.8	6.6817	.25543	2767.5	6.6596	.24026
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3722.4	8.2557	.62513	3722.1	8.2212	.58035	3721.7	8.1890	.54153	3721.3	8.1589	.50756
620	3744.7	8.2808	.63230	3744.3	8.2462	.58701	3743.9	8.2141	.54775	3743.5	8.1839	.51340
630	3767.0	8.3056	.63947	3766.6	8.2711	.59366	3766.2	8.2389	.55397	3765.8	8.2088	.51923
640	3789.3	8.3302	.64663	3789.0	8.2957	.60032	3788.6	8.2635	.56018	3788.2	8.2334	.52506
650	3811.8	8.3546	.65379	3811.4	8.3201	.60697	3811.0	8.2880	.56640	3810.7	8.2579	.53089
660	3834.2	8.3788	.66095	3833.9	8.3444	.61362	3833.5	8.3122	.57261	3833.2	8.2822	.53672
670	3856.8	8.4029	.66810	3856.5	8.3684	.62027	3856.1	8.3363	.57882	3855.8	8.3062	.54255
680	3879.4	8.4267	.67526	3879.1	8.3923	.62692	3878.8	8.3602	.58503	3878.4	8.3301	.54837
690	3902.1	8.4504	.68241	3901.8	8.4160	.63356	3901.5	8.3839	.59123	3901.1	8.3538	.55419
700	3924.8	8.4739	.68956	3924.5	8.4395	.64021	3924.2	8.4074	.59744	3923.9	8.3773	.56001
710	3947.6	8.4972	.69671	3947.3	8.4628	.64685	3947.0	8.4307	.60364	3946.7	8.4007	.56583
720	3970.5	8.5204	.70386	3970.2	8.4859	.65349	3969.9	8.4539	.60984	3969.6	8.4238	.57164
730	3993.4	8.5433	.71100	3993.2	8.5089	.66013	3992.9	8.4769	.61604	3992.6	8.4468	.57746
740	4016.4	8.5661	.71815	4016.2	8.5317	.66676	4015.9	8.4997	.62223	4015.6	8.4697	.58327
750	4039.5	8.5888	.72529	4039.2	8.5544	.67340	4039.0	8.5223	.62843	4038.7	8.4923	.58908
760	4062.6	8.6113	.73243	4062.4	8.5769	.68003	4062.1	8.5448	.63462	4061.8	8.5149	.59489
770	4085.8	8.6336	.73957	4085.5	8.5992	.68667	4085.3	8.5672	.64082	4085.0	8.5372	.60070
780	4109.0	8.6558	.74671	4108.8	8.6214	.69330	4108.5	8.5894	.64701	4108.3	8.5594	.60650
790	4132.3	8.6778	.75384	4132.1	8.6434	.69993	4131.9	8.6114	.65320	4131.6	8.5814	.61231
800	4155.7	8.6997	.76098	4155.5	8.6653	.70655	4155.2	8.6333	.65939	4155.0	8.6033	.61811

TABLE 3 WATER AND STEAM

p(MPa)	.850			.900			.950			1.000		
SAT t(°C)	172.94			175.36			177.67			179.88		
SAT.LIQ	732.0	2.0705	.0011182	742.6	2.0941	.0011213	752.8	2.1166	.0011244	762.6	2.1382	.0011274
SAT.VAP	2769.9	6.6388	.22681	2772.1	6.6192	.21481	2774.2	6.6005	.20403	2776.2	6.5828	.19429
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	.8	-.0001	.0009998	.9	-.0001	.0009998	.9	-.0001	.0009997	1.0	-.0001	.0009997
10	42.8	.1509	.0009999	42.9	.1509	.0009998	42.9	.1509	.0009998	43.0	.1509	.0009998
20	84.7	.2961	.0010013	84.7	.2961	.0010013	84.8	.2961	.0010013	84.8	.2961	.0010013
30	126.4	.4362	.0010039	126.5	.4362	.0010039	126.5	.4362	.0010039	126.6	.4362	.0010039
40	168.2	.5718	.0010074	168.2	.5718	.0010074	168.3	.5718	.0010074	168.3	.5717	.0010074
50	210.0	.7031	.0010117	210.0	.7031	.0010117	210.1	.7031	.0010117	210.1	.7031	.0010117
60	251.8	.8305	.0010168	251.8	.8305	.0010167	251.9	.8305	.0010167	251.9	.8305	.0010167
70	293.6	.9543	.0010225	293.7	.9543	.0010224	293.7	.9543	.0010224	293.8	.9542	.0010224
80	335.6	1.0747	.0010288	335.6	1.0747	.0010288	335.6	1.0747	.0010288	335.7	1.0746	.0010287
90	377.5	1.1920	.0010358	377.6	1.1919	.0010357	377.6	1.1919	.0010357	377.7	1.1919	.0010357
100	419.6	1.3063	.0010433	419.7	1.3062	.0010433	419.7	1.3062	.0010433	419.7	1.3062	.0010432
110	461.8	1.4179	.0010515	461.9	1.4178	.0010514	461.9	1.4178	.0010514	461.9	1.4178	.0010514
120	504.2	1.5270	.0010603	504.2	1.5270	.0010602	504.2	1.5269	.0010602	504.3	1.5269	.0010602
130	546.7	1.6338	.0010697	546.7	1.6338	.0010696	546.8	1.6337	.0010696	546.8	1.6337	.0010696
140	589.4	1.7385	.0010797	589.5	1.7384	.0010797	589.5	1.7384	.0010797	589.5	1.7383	.0010796
150	632.4	1.8412	.0010905	632.4	1.8412	.0010905	632.4	1.8411	.0010905	632.5	1.8411	.0010904
160	675.6	1.9422	.0011021	675.6	1.9421	.0011020	675.7	1.9421	.0011020	675.7	1.9420	.0011019
170	719.1	2.0416	.0011144	719.2	2.0415	.0011144	719.2	2.0414	.0011143	719.2	2.0414	.0011143
180	2787.5	6.6780	.23158	2783.9	6.6452	.21781	2780.2	6.6137	.20548	2776.5	6.5835	.19436
190	2811.9	6.7312	.23820	2808.6	6.6992	.22414	2805.3	6.6686	.21156	2802.0	6.6392	.20022
200	2835.7	6.7820	.24466	2832.7	6.7508	.23032	2829.8	6.7209	.21748	2826.8	6.6922	.20592
210	2859.0	6.8308	.25100	2856.3	6.8001	.23637	2853.7	6.7708	.22328	2851.0	6.7427	.21148
220	2881.9	6.8777	.25724	2879.5	6.8475	.24231	2877.0	6.8187	.22896	2874.6	6.7911	.21693
230	2904.4	6.9229	.26338	2902.2	6.8931	.24816	2900.0	6.8648	.23454	2897.8	6.8377	.22228
240	2926.6	6.9666	.26944	2924.6	6.9373	.25393	2922.6	6.9093	.24005	2920.6	6.8825	.22755
250	2948.6	7.0091	.27543	2946.8	6.9800	.25963	2944.9	6.9523	.24548	2943.0	6.9259	.23275
260	2970.4	7.0503	.28137	2968.7	7.0215	.26527	2967.0	6.9941	.25086	2965.2	6.9680	.23789
270	2992.0	7.0904	.28726	2990.4	7.0618	.27086	2988.8	7.0347	.25618	2987.2	7.0088	.24297
280	3013.4	7.1295	.29310	3012.0	7.1012	.27640	3010.5	7.0742	.26146	3009.0	7.0485	.24801
290	3034.7	7.1678	.29891	3033.4	7.1396	.28191	3032.0	7.1128	.26670	3030.6	7.0873	.25301
300	3056.0	7.2051	.30468	3054.7	7.1771	.28739	3053.4	7.1505	.27191	3052.1	7.1251	.25798

TABLE 3 WATER AND STEAM

p(MPa) =	.850			.900			.950			1.000		
SAT t(°C)	172.94			175.36			177.67			179.88		
SAT.LIQ	732.0	2.0705	.0011182	742.6	2.0941	.0011213	752.8	2.1166	.0011244	762.6	2.1382	.0011274
SAT.VAP	2769.9	6.6388	.22681	2772.1	6.6192	.21481	2774.2	6.6005	.20403	2776.2	6.5828	.19429
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3077.2	7.2418	.31043	3076.0	7.2139	.29283	3074.8	7.1874	.27709	3073.5	7.1622	.26291
320	3098.3	7.2777	.31615	3097.1	7.2499	.29825	3096.0	7.2235	.28224	3094.9	7.1984	.26782
330	3119.3	7.3129	.32185	3118.3	7.2852	.30365	3117.2	7.2590	.28737	3116.1	7.2340	.27271
340	3140.4	7.3475	.32753	3139.4	7.3199	.30903	3138.4	7.2938	.29248	3137.4	7.2689	.27758
350	3161.4	7.3815	.33320	3160.5	7.3540	.31440	3159.5	7.3279	.29757	3158.5	7.3031	.28243
360	3182.5	7.4150	.33884	3181.6	7.3876	.31974	3180.6	7.3616	.30265	3179.7	7.3368	.28727
370	3203.5	7.4480	.34448	3202.6	7.4206	.32508	3201.8	7.3947	.30772	3200.9	7.3700	.29209
380	3224.4	7.4805	.35010	3223.7	7.4532	.33040	3222.9	7.4273	.31277	3222.0	7.4027	.29690
390	3245.6	7.5125	.35571	3244.8	7.4852	.33571	3244.0	7.4594	.31781	3243.2	7.4348	.30170
400	3266.7	7.5441	.36131	3266.0	7.5169	.34101	3265.2	7.4911	.32284	3264.4	7.4665	.30649
410	3287.8	7.5752	.36691	3287.1	7.5480	.34630	3286.4	7.5223	.32786	3285.6	7.4978	.31127
420	3309.0	7.6060	.37249	3308.3	7.5788	.35158	3307.6	7.5531	.33287	3306.9	7.5287	.31604
430	3330.2	7.6363	.37807	3329.5	7.6092	.35686	3328.8	7.5836	.33788	3328.1	7.5592	.32080
440	3351.5	7.6663	.38364	3350.8	7.6393	.36212	3350.1	7.6136	.34288	3349.5	7.5893	.32555
450	3372.7	7.6960	.38920	3372.1	7.6689	.36739	3371.5	7.6433	.34787	3370.8	7.6190	.33030
460	3394.1	7.7253	.39476	3393.5	7.6983	.37264	3392.8	7.6727	.35285	3392.2	7.6484	.33505
470	3415.5	7.7542	.40031	3414.9	7.7273	.37789	3414.3	7.7017	.35783	3413.6	7.6775	.33978
480	3436.9	7.7829	.40585	3436.3	7.7560	.38314	3435.7	7.7304	.36281	3435.1	7.7062	.34452
490	3458.4	7.8112	.41140	3457.8	7.7843	.38838	3457.3	7.7588	.36778	3456.7	7.7346	.34924
500	3479.9	7.8393	.41693	3479.4	7.8124	.39361	3478.8	7.7869	.37274	3478.3	7.7627	.35396
510	3501.5	7.8671	.42246	3501.0	7.8402	.39884	3500.5	7.8147	.37771	3499.9	7.7905	.35868
520	3523.2	7.8945	.42799	3522.7	7.8677	.40407	3522.2	7.8422	.38266	3521.6	7.8181	.36340
530	3544.9	7.9218	.43352	3544.4	7.8949	.40929	3543.9	7.8695	.38762	3543.4	7.8454	.36811
540	3566.7	7.9487	.43904	3566.2	7.9219	.41451	3565.7	7.8965	.39256	3565.2	7.8724	.37281
550	3588.5	7.9754	.44456	3588.1	7.9486	.41973	3587.6	7.9232	.39751	3587.1	7.8991	.37752
560	3610.4	8.0018	.45007	3610.0	7.9750	.42494	3609.5	7.9497	.40245	3609.0	7.9256	.38222
570	3632.4	8.0280	.45558	3631.9	8.0013	.43015	3631.5	7.9759	.40739	3631.0	7.9518	.38691
580	3654.4	8.0540	.46109	3654.0	8.0272	.43535	3653.5	8.0019	.41233	3653.1	7.9779	.39161
590	3676.5	8.0797	.46659	3676.1	8.0530	.44056	3675.7	8.0277	.41726	3675.2	8.0036	.39630
600	3698.6	8.1053	.47209	3698.2	8.0785	.44576	3697.8	8.0532	.42219	3697.4	8.0292	.40098

TABLE 3 WATER AND STEAM

p(MPa) =	.850			.900			.950			1.000		
SAT t(°C)	172.94			175.36			177.67			179.88		
SAT.LIQ	732.0	2.0705	.0011182	742.6	2.0941	.0011213	752.8	2.1166	.0011244	762.6	2.1382	.0011274
SAT.VAP	2769.9	6.6388	.22681	2772.1	6.6192	.21481	2774.2	6.6005	.20403	2776.2	6.5828	.19429
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3720.9	8.1305	.47759	3720.5	8.1038	.45095	3720.1	8.0785	.42712	3719.7	8.0545	.40567
620	3743.1	8.1556	.48309	3742.7	8.1289	.45615	3742.4	8.1036	.43204	3742.0	8.0796	.41035
630	3765.5	8.1805	.48859	3765.1	8.1538	.46134	3764.7	8.1285	.43697	3764.3	8.1045	.41503
640	3787.9	8.2052	.49408	3787.5	8.1785	.46653	3787.1	8.1532	.44189	3786.8	8.1292	.41971
650	3810.3	8.2296	.49957	3810.0	8.2030	.47172	3809.6	8.1777	.44681	3809.3	8.1537	.42438
660	3832.9	8.2539	.50505	3832.5	8.2272	.47691	3832.2	8.2020	.45172	3831.8	8.1780	.42906
670	3855.4	8.2780	.51054	3855.1	8.2513	.48209	3854.8	8.2261	.45664	3854.4	8.2021	.43373
680	3878.1	8.3019	.51602	3877.8	8.2752	.48727	3877.4	8.2500	.46155	3877.1	8.2261	.43840
690	3900.8	8.3256	.52151	3900.5	8.2989	.49245	3900.2	8.2737	.46646	3899.9	8.2498	.44306
700	3923.6	8.3491	.52699	3923.3	8.3225	.49763	3923.0	8.2973	.47137	3922.7	8.2734	.44773
710	3946.4	8.3725	.53246	3946.1	8.3458	.50281	3945.8	8.3206	.47627	3945.5	8.2967	.45239
720	3969.3	8.3956	.53794	3969.0	8.3690	.50798	3968.8	8.3438	.48118	3968.5	8.3199	.45706
730	3992.3	8.4186	.54341	3992.0	8.3920	.51316	3991.7	8.3669	.48608	3991.4	8.3430	.46172
740	4015.3	8.4415	.54889	4015.1	8.4149	.51833	4014.8	8.3897	.49098	4014.5	8.3658	.46637
750	4038.4	8.4642	.55436	4038.1	8.4376	.52350	4037.9	8.4124	.49588	4037.6	8.3885	.47103
760	4061.6	8.4867	.55983	4061.3	8.4601	.52867	4061.0	8.4349	.50078	4060.8	8.4111	.47569
770	4084.8	8.5090	.56530	4084.5	8.4825	.53383	4084.3	8.4573	.50568	4084.0	8.4335	.48034
780	4108.0	8.5312	.57077	4107.8	8.5047	.53900	4107.6	8.4795	.51058	4107.3	8.4557	.48499
790	4131.4	8.5533	.57623	4131.1	8.5267	.54416	4130.9	8.5016	.51547	4130.7	8.4777	.48965
800	4154.8	8.5752	.58170	4154.5	8.5486	.54933	4154.3	8.5235	.52036	4154.1	8.4997	.49430

TABLE 3 WATER AND STEAM

p(MPa)	= 1.050			1.100			= 1.150			= 1.200		
SAT t(°C)	182.02			184.07			186.05			187.96		
SAT.LIQ	772.0	2.1588	.0011303	781.1	2.1786	.0011331	789.9	2.1977	.0011359	798.4	2.2161	.0011386
SAT.VAP	2778.0	6.5659	.18545	2779.7	6.5497	.17738	2781.3	6.5342	.16999	2782.7	6.5194	.16320
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	1.0	-.0001	.0009997	1.1	-.0001	.0009997	1.1	-.0001	.0009996	1.2	-.0001	.0009996
10	43.0	.1509	.0009998	43.1	.1509	.0009997	43.1	.1509	.0009997	43.2	.1509	.0009997
20	84.8	.2961	.0010012	84.9	.2961	.0010012	84.9	.2961	.0010012	85.0	.2960	.0010012
30	126.6	.4362	.0010038	126.7	.4362	.0010038	126.7	.4362	.0010038	126.8	.4361	.0010038
40	168.4	.5717	.0010073	168.4	.5717	.0010073	168.5	.5717	.0010073	168.5	.5717	.0010073
50	210.1	.7030	.0010116	210.2	.7030	.0010116	210.2	.7030	.0010116	210.3	.7030	.0010116
60	252.0	.8304	.0010167	252.0	.8304	.0010167	252.0	.8304	.0010166	252.1	.8304	.0010166
70	293.8	.9542	.0010224	293.8	.9542	.0010223	293.9	.9541	.0010223	293.9	.9541	.0010223
80	335.7	1.0746	.0010287	335.8	1.0746	.0010287	335.8	1.0745	.0010287	335.8	1.0745	.0010286
90	377.7	1.1918	.0010357	377.7	1.1918	.0010356	377.8	1.1917	.0010356	377.8	1.1917	.0010356
100	419.8	1.3061	.0010432	419.8	1.3061	.0010432	419.9	1.3060	.0010432	419.9	1.3060	.0010431
110	462.0	1.4177	.0010514	462.0	1.4177	.0010513	462.0	1.4176	.0010513	462.1	1.4176	.0010513
120	504.3	1.5268	.0010601	504.4	1.5268	.0010601	504.4	1.5267	.0010601	504.4	1.5267	.0010601
130	546.8	1.6336	.0010695	546.9	1.6336	.0010695	546.9	1.6335	.0010695	546.9	1.6335	.0010695
140	589.6	1.7383	.0010796	589.6	1.7382	.0010796	589.6	1.7382	.0010795	589.6	1.7381	.0010795
150	632.5	1.8410	.0010904	632.5	1.8409	.0010903	632.6	1.8409	.0010903	632.6	1.8408	.0010903
160	675.7	1.9420	.0011019	675.8	1.9419	.0011019	675.8	1.9418	.0011018	675.8	1.9418	.0011018
170	719.3	2.0413	.0011142	719.3	2.0412	.0011142	719.3	2.0412	.0011142	719.3	2.0411	.0011141
180	763.1	2.1392	.0011275	763.2	2.1392	.0011274	763.2	2.1391	.0011274	763.2	2.1390	.0011274
190	2798.6	6.6108	.18995	2795.2	6.5834	.18061	2791.7	6.5569	.17207	2788.2	6.5312	.16424
200	2823.8	6.6645	.19545	2820.7	6.6379	.18592	2817.6	6.6122	.17722	2814.4	6.5872	.16923
210	2848.2	6.7157	.20080	2845.5	6.6897	.19109	2842.7	6.6646	.18222	2839.8	6.6403	.17408
220	2872.1	6.7647	.20604	2869.6	6.7392	.19614	2867.1	6.7147	.18710	2864.5	6.6909	.17880
230	2895.5	6.8117	.21119	2893.2	6.7867	.20109	2891.0	6.7626	.19187	2888.6	6.7394	.18342
240	2918.5	6.8569	.21624	2916.4	6.8323	.20596	2914.4	6.8086	.19656	2912.2	6.7858	.18795
250	2941.2	6.9006	.22122	2939.3	6.8764	.21075	2937.4	6.8530	.20118	2935.4	6.8305	.19240
260	2963.5	6.9430	.22615	2961.8	6.9190	.21547	2960.0	6.8959	.20573	2958.2	6.8738	.19679
270	2985.6	6.9840	.23102	2984.0	6.9603	.22015	2982.4	6.9375	.21022	2980.8	6.9156	.20112
280	3007.5	7.0240	.23584	3006.0	7.0005	.22477	3004.5	6.9779	.21467	3003.0	6.9562	.20540
290	3029.3	7.0629	.24062	3027.9	7.0396	.22936	3026.5	7.0172	.21907	3025.1	6.9957	.20964
300	3050.8	7.1009	.24537	3049.6	7.0778	.23391	3048.2	7.0556	.22344	3046.9	7.0342	.21385

TABLE 3 WATER AND STEAM

p(MPa) =	1.050			1.100			1.150			= 1.200		
SAT t(°C)	182.02			184.07			186.05			187.98		
SAT.LIQ	772.0	2.1588	.0011303	781.1	2.1786	.0011331	789.9	2.1977	.0011359	798.4	2.2161	.0011386
SAT.VAP	2778.0	6.5659	.18545	2779.7	6.5497	.17738	2781.3	6.5342	.16999	2782.7	6.5194	.16320
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3072.3	7.1381	.25009	3071.1	7.1151	.23843	3069.9	7.0930	.22779	3068.7	7.0718	.21803
320	3093.7	7.1745	.25478	3092.6	7.1516	.24293	3091.4	7.1296	.23210	3090.3	7.1085	.22217
330	3115.1	7.2101	.25945	3114.0	7.1873	.24740	3112.9	7.1655	.23639	3111.8	7.1445	.22630
340	3136.3	7.2451	.26410	3135.3	7.2224	.25185	3134.3	7.2007	.24066	3133.2	7.1798	.23040
350	3157.6	7.2795	.26874	3156.6	7.2569	.25628	3155.6	7.2352	.24491	3154.6	7.2144	.23449
360	3178.8	7.3133	.27335	3177.9	7.2907	.26070	3176.9	7.2691	.24915	3176.0	7.2484	.23856
370	3200.0	7.3465	.27795	3199.1	7.3240	.26510	3198.2	7.3025	.25337	3197.3	7.2818	.24261
380	3221.2	7.3792	.28255	3220.3	7.3568	.26949	3219.5	7.3353	.25758	3218.7	7.3147	.24665
390	3242.4	7.4114	.28712	3241.6	7.3891	.27387	3240.8	7.3677	.26177	3240.0	7.3471	.25068
400	3263.6	7.4432	.29169	3262.9	7.4209	.27824	3262.1	7.3995	.26596	3261.3	7.3790	.25470
410	3284.9	7.4745	.29625	3284.1	7.4523	.28260	3283.4	7.4309	.27014	3282.6	7.4105	.25872
420	3306.1	7.5054	.30080	3305.4	7.4832	.28695	3304.7	7.4619	.27431	3304.0	7.4415	.26272
430	3327.4	7.5359	.30535	3326.8	7.5138	.29130	3326.1	7.4925	.27847	3325.4	7.4722	.26671
440	3348.8	7.5661	.30988	3348.1	7.5439	.29563	3347.4	7.5227	.28262	3346.8	7.5024	.27070
450	3370.2	7.5958	.31441	3369.5	7.5737	.29996	3368.9	7.5525	.28677	3368.2	7.5323	.27468
460	3391.6	7.6253	.31893	3391.0	7.6032	.30429	3390.3	7.5820	.29091	3389.7	7.5618	.27865
470	3413.0	7.6543	.32345	3412.4	7.6323	.30860	3411.8	7.6112	.29505	3411.2	7.5909	.28262
480	3434.6	7.6831	.32796	3434.0	7.6611	.31292	3433.4	7.6400	.29918	3432.8	7.6198	.28658
490	3456.1	7.7115	.33247	3455.6	7.6895	.31722	3455.0	7.6685	.30330	3454.4	7.6483	.29054
500	3477.7	7.7397	.33697	3477.2	7.7177	.32153	3476.6	7.6966	.30742	3476.1	7.6765	.29450
510	3499.4	7.7675	.34147	3498.9	7.7455	.32583	3498.3	7.7245	.31154	3497.8	7.7044	.29844
520	3521.1	7.7951	.34597	3520.6	7.7731	.33012	3520.1	7.7521	.31565	3519.6	7.7320	.30239
530	3542.9	7.8224	.35046	3542.4	7.8004	.33441	3541.9	7.7795	.31976	3541.4	7.7593	.30633
540	3564.7	7.8494	.35494	3564.3	7.8275	.33870	3563.8	7.8065	.32386	3563.3	7.7864	.31027
550	3586.6	7.8762	.35943	3586.2	7.8543	.34298	3585.7	7.8333	.32797	3585.2	7.8132	.31420
560	3608.6	7.9027	.36391	3608.1	7.8808	.34726	3607.7	7.8598	.33206	3607.2	7.8398	.31813
570	3630.6	7.9289	.36838	3630.2	7.9071	.35154	3629.7	7.8861	.33616	3629.3	7.8661	.32206
580	3652.7	7.9550	.37286	3652.2	7.9331	.35581	3651.8	7.9122	.34025	3651.4	7.8922	.32598
590	3674.8	7.9807	.37733	3674.4	7.9589	.36008	3674.0	7.9380	.34434	3673.5	7.9180	.32990
600	3697.0	8.0063	.38179	3696.6	7.9845	.36435	3696.2	7.9636	.34842	3695.8	7.9436	.33382

TABLE 3 WATER AND STEAM

p(MPa) =	1.050			1.100			1.150			= 1.200		
SAT t(°C)	182.02			184.07			186.05			187.96		
SAT.LIQ	772.0	2.1588	.0011303	781.1	2.1786	.0011331	789.9	2.1977	.0011359	798.4	2.2161	.0011386
SAT.VAP	2778.0	6.5659	.18545	2779.7	6.5497	.17738	2781.3	6.5342	.16999	2782.7	6.5194	.16320
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3719.3	8.0317	.38626	3718.9	8.0098	.36862	3718.5	7.9890	.35251	3718.1	7.9690	.33774
620	3741.6	8.0568	.39072	3741.2	8.0350	.37288	3740.8	8.0141	.35659	3740.4	7.9942	.34165
630	3764.0	8.0817	.39518	3763.6	8.0599	.37714	3763.2	8.0391	.36066	3762.8	8.0191	.34556
640	3786.4	8.1064	.39964	3786.0	8.0846	.38140	3785.7	8.0638	.36474	3785.3	8.0439	.34947
650	3808.9	8.1309	.40410	3808.5	8.1092	.38565	3808.2	8.0883	.36881	3807.8	8.0684	.35338
660	3831.5	8.1552	.40855	3831.1	8.1335	.38991	3830.8	8.1127	.37288	3830.4	8.0928	.35728
670	3854.1	8.1794	.41300	3853.8	8.1576	.39416	3853.4	8.1368	.37695	3853.1	8.1169	.36118
680	3876.8	8.2033	.41745	3876.5	8.1816	.39841	3876.1	8.1608	.38102	3875.8	8.1409	.36508
690	3899.5	8.2270	.42190	3899.2	8.2053	.40266	3898.9	8.1845	.38509	3898.6	8.1646	.36898
700	3922.4	8.2506	.42634	3922.0	8.2289	.40690	3921.7	8.2081	.38915	3921.4	8.1882	.37288
710	3945.2	8.2740	.43079	3944.9	8.2523	.41115	3944.6	8.2315	.39321	3944.3	8.2116	.37677
720	3968.2	8.2972	.43523	3967.9	8.2755	.41539	3967.6	8.2547	.39727	3967.3	8.2349	.38066
730	3991.2	8.3202	.43967	3990.9	8.2985	.41963	3990.6	8.2778	.40133	3990.3	8.2579	.38456
740	4014.2	8.3431	.44411	4013.9	8.3214	.42387	4013.7	8.3007	.40539	4013.4	8.2808	.38845
750	4037.3	8.3658	.44855	4037.1	8.3441	.42811	4036.8	8.3234	.40944	4036.5	8.3036	.39233
760	4060.5	8.3884	.45298	4060.3	8.3667	.43234	4060.0	8.3460	.41350	4059.7	8.3261	.39622
770	4083.8	8.4107	.45742	4083.5	8.3891	.43658	4083.2	8.3684	.41755	4083.0	8.3485	.40010
780	4107.1	8.4330	.46185	4106.8	8.4113	.44081	4106.6	8.3906	.42160	4106.3	8.3708	.40399
790	4130.4	8.4550	.46628	4130.2	8.4334	.44504	4129.9	8.4127	.42565	4129.7	8.3929	.40787
800	4153.8	8.4770	.47071	4153.6	8.4553	.44927	4153.4	8.4346	.42970	4153.1	8.4148	.41175

TABLE 3 WATER AND STEAM

p(MPa)=	1.250			1.300			1.350			1.400		
SAT t(°C)	189.81			191.61			193.35			195.04		
SAT.LIQ	806.7	2.2338	.0011412	814.7	2.2510	.0011438	822.5	2.2676	.0011464	830.1	2.2837	.0011489
SAT.VAP	2784.1	6.5051	.15693	2785.4	6.4913	.15113	2786.6	6.4780	.14574	2787.8	6.4651	.14072
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	1.2	-.0001	.0009996	1.3	-.0000	.0009996	1.3	-.0000	.0009995	1.4	-.0000	.0009995
10	43.2	.1509	.0009997	43.3	.1509	.0009996	43.3	.1509	.0009996	43.4	.1509	.0009996
20	85.0	.2960	.0010012	85.1	.2960	.0010011	85.1	.2960	.0010011	85.2	.2960	.0010011
30	126.8	.4361	.0010038	126.8	.4361	.0010037	126.9	.4361	.0010037	126.9	.4361	.0010037
40	168.6	.5716	.0010073	168.6	.5716	.0010072	168.6	.5716	.0010072	168.7	.5716	.0010072
50	210.3	.7029	.0010116	210.4	.7029	.0010115	210.4	.7029	.0010115	210.5	.7029	.0010115
60	252.1	.8303	.0010166	252.2	.8303	.0010166	252.2	.8303	.0010165	252.2	.8302	.0010165
70	294.0	.9541	.0010223	294.0	.9541	.0010223	294.0	.9540	.0010222	294.1	.9540	.0010222
80	335.9	1.0745	.0010286	335.9	1.0744	.0010286	336.0	1.0744	.0010286	336.0	1.0744	.0010285
90	377.9	1.1917	.0010356	377.9	1.1916	.0010355	377.9	1.1916	.0010355	378.0	1.1916	.0010355
100	419.9	1.3060	.0010431	420.0	1.3059	.0010431	420.0	1.3059	.0010431	420.0	1.3058	.0010430
110	462.1	1.4176	.0010513	462.2	1.4175	.0010512	462.2	1.4175	.0010512	462.2	1.4174	.0010512
120	504.5	1.5266	.0010600	504.5	1.5266	.0010600	504.5	1.5265	.0010600	504.6	1.5265	.0010599
130	547.0	1.6334	.0010694	547.0	1.6334	.0010694	547.0	1.6333	.0010694	547.1	1.6333	.0010693
140	589.7	1.7381	.0010795	589.7	1.7380	.0010794	589.7	1.7380	.0010794	589.8	1.7379	.0010794
150	632.6	1.8408	.0010902	632.7	1.8407	.0010902	632.7	1.8407	.0010902	632.7	1.8406	.0010901
160	675.8	1.9417	.0011018	675.9	1.9417	.0011017	675.9	1.9416	.0011017	675.9	1.9415	.0011016
170	719.4	2.0411	.0011141	719.4	2.0410	.0011140	719.4	2.0409	.0011140	719.5	2.0409	.0011140
180	763.2	2.1390	.0011273	763.3	2.1389	.0011273	763.3	2.1388	.0011272	763.3	2.1387	.0011272
190	2784.6	6.5061	.15702	807.5	2.2355	.0011415	807.6	2.2354	.0011414	807.6	2.2354	.0011414
200	2811.2	6.5630	.16188	2808.0	6.5394	.15509	2804.7	6.5165	.14879	2801.4	6.4941	.14294
210	2837.0	6.6168	.16659	2834.1	6.5939	.15966	2831.1	6.5717	.15325	2828.2	6.5500	.14729
220	2861.9	6.6680	.17117	2859.3	6.6457	.16411	2856.7	6.6240	.15758	2854.0	6.6030	.15151
230	2886.3	6.7169	.17564	2883.9	6.6951	.16845	2881.6	6.6739	.16179	2879.1	6.6534	.15561
240	2910.1	6.7637	.18002	2908.0	6.7424	.17270	2905.8	6.7217	.16592	2903.6	6.7016	.15962
250	2933.5	6.8088	.18433	2931.5	6.7878	.17687	2929.5	6.7675	.16996	2927.6	6.7477	.16355
260	2956.5	6.8523	.18856	2954.7	6.8316	.18097	2952.9	6.8116	.17394	2951.0	6.7922	.16740
270	2979.1	6.8944	.19274	2977.5	6.8740	.18501	2975.8	6.8542	.17785	2974.1	6.8351	.17120
280	3001.5	6.9353	.19688	3000.0	6.9151	.18901	2998.4	6.8955	.18172	2996.9	6.8766	.17495
290	3023.6	6.9750	.20097	3022.2	6.9550	.19296	3020.8	6.9356	.18554	3019.4	6.9169	.17865
300	3045.6	7.0136	.20502	3044.3	6.9938	.19687	3043.0	6.9746	.18933	3041.6	6.9561	.18232

TABLE 3 WATER AND STEAM

p(MPa) =	1.250			1.300			1.350			1.400		
SAT t(°C)	189.81			191.61			193.35			195.04		
SAT.LIQ	806.7	2.2338	.0011412	814.7	2.2510	.0011438	822.5	2.2676	.0011464	830.1	2.2837	.0011489
SAT.VAP	2789.1	6.5051	.15693	2785.4	6.4913	.15113	2786.6	6.4780	.14574	2787.8	6.4651	.14072
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3067.4	7.0514	.20905	3066.2	7.0317	.20076	3064.9	7.0127	.19308	3063.7	6.9943	.18595
320	3089.1	7.0882	.21304	3088.0	7.0687	.20461	3086.8	7.0498	.19681	3085.6	7.0315	.18956
330	3110.7	7.1243	.21701	3109.6	7.1049	.20844	3108.5	7.0861	.20051	3107.4	7.0680	.19314
340	3132.2	7.1597	.22097	3131.2	7.1404	.21225	3130.1	7.1217	.20419	3129.1	7.1036	.19670
350	3153.7	7.1944	.22490	3152.7	7.1751	.21605	3151.7	7.1566	.20785	3150.7	7.1386	.20024
360	3175.1	7.2285	.22881	3174.1	7.2093	.21982	3173.2	7.1908	.21149	3172.3	7.1729	.20376
370	3196.4	7.2620	.23272	3195.6	7.2429	.22358	3194.7	7.2244	.21512	3193.8	7.2066	.20727
380	3217.8	7.2949	.23660	3217.0	7.2759	.22733	3216.1	7.2575	.21874	3215.3	7.2398	.21076
390	3239.2	7.3274	.24048	3238.3	7.3084	.23106	3237.5	7.2901	.22234	3236.7	7.2724	.21424
400	3260.5	7.3593	.24435	3259.7	7.3404	.23479	3259.0	7.3221	.22594	3258.2	7.3045	.21772
410	3281.9	7.3909	.24820	3281.1	7.3720	.23850	3280.4	7.3537	.22952	3279.6	7.3361	.22118
420	3303.3	7.4219	.25205	3302.5	7.4031	.24221	3301.8	7.3849	.23309	3301.1	7.3673	.22463
430	3324.7	7.4526	.25589	3324.0	7.4338	.24591	3323.3	7.4156	.23666	3322.6	7.3981	.22808
440	3346.1	7.4829	.25973	3345.4	7.4641	.24960	3344.8	7.4460	.24022	3344.1	7.4285	.23151
450	3367.6	7.5128	.26355	3366.9	7.4940	.25328	3366.3	7.4759	.24378	3365.6	7.4585	.23495
460	3389.1	7.5423	.26737	3388.5	7.5236	.25696	3387.8	7.5055	.24732	3387.2	7.4881	.23837
470	3410.6	7.5715	.27119	3410.0	7.5528	.26063	3409.4	7.5348	.25086	3408.8	7.5174	.24179
480	3432.2	7.6003	.27500	3431.6	7.5817	.26430	3431.0	7.5637	.25440	3430.5	7.5463	.24520
490	3453.9	7.6289	.27880	3453.3	7.6102	.26796	3452.7	7.5923	.25793	3452.2	7.5749	.24861
500	3475.5	7.6571	.28260	3475.0	7.6385	.27162	3474.4	7.6205	.26146	3473.9	7.6032	.25202
510	3497.3	7.6850	.28640	3496.7	7.6664	.27528	3496.2	7.6485	.26498	3495.7	7.6312	.25542
520	3519.1	7.7127	.29019	3518.5	7.6941	.27892	3518.0	7.6762	.26850	3517.5	7.6589	.25881
530	3540.9	7.7400	.29397	3540.4	7.7215	.28257	3539.9	7.7036	.27201	3539.4	7.6863	.26220
540	3562.8	7.7671	.29776	3562.3	7.7486	.28621	3561.8	7.7307	.27552	3561.3	7.7135	.26559
550	3584.7	7.7940	.30154	3584.3	7.7754	.28985	3583.8	7.7576	.27903	3583.3	7.7404	.26898
560	3606.8	7.8205	.30531	3606.3	7.8020	.29348	3605.8	7.7842	.28253	3605.4	7.7670	.27236
570	3628.8	7.8469	.30909	3628.4	7.8284	.29711	3627.9	7.8105	.28603	3627.5	7.7934	.27573
580	3650.9	7.8730	.31286	3650.5	7.8545	.30074	3650.1	7.8367	.28953	3649.6	7.8195	.27911
590	3673.1	7.8988	.31663	3672.7	7.8803	.30437	3672.3	7.8625	.29302	3671.9	7.8454	.28248
600	3695.4	7.9244	.32039	3695.0	7.9060	.30799	3694.5	7.8832	.29651	3694.1	7.8710	.28585

TABLE 3 WATER AND STEAM

p(MPa)	1.250			1.300			1.350			1.400		
SAT t(°C)	189.81			191.61			193.35			195.04		
SAT.LIQ	806.7	2.2338	.0011412	814.7	2.2510	.0011438	822.5	2.2676	.0011464	830.1	2.2837	.0011489
SAT.VAP	2784.1	6.5051	.15693	2785.4	6.4913	.15113	2786.6	6.4780	.14574	2787.8	6.4651	.14072
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3717.7	7.9498	.32415	3717.3	7.9314	.31161	3716.9	7.9136	.30000	3716.5	7.8965	.28922
620	3740.0	7.9750	.32791	3739.6	7.9566	.31523	3739.3	7.9388	.30349	3738.9	7.9217	.29258
630	3762.5	8.0000	.33167	3762.1	7.9815	.31884	3761.7	7.9638	.30697	3761.3	7.9467	.29594
640	3784.9	8.0247	.33542	3784.6	8.0063	.32246	3784.2	7.9886	.31045	3783.8	7.9715	.29930
650	3807.5	8.0493	.33918	3807.1	8.0309	.32607	3806.8	8.0132	.31393	3806.4	7.9961	.30266
660	3830.1	8.0736	.34293	3829.7	8.0552	.32967	3829.4	8.0375	.31741	3829.0	8.0205	.30601
670	3852.7	8.0978	.34667	3852.4	8.0794	.33328	3852.1	8.0617	.32088	3851.7	8.0447	.30937
680	3875.5	8.1218	.35042	3875.1	8.1034	.33689	3874.8	8.0857	.32435	3874.5	8.0687	.31272
690	3898.3	8.1455	.35416	3897.9	8.1272	.34049	3897.6	8.1095	.32782	3897.3	8.0925	.31606
700	3921.1	8.1691	.35791	3920.8	8.1508	.34409	3920.5	8.1331	.33129	3920.2	8.1161	.31941
710	3944.0	8.1926	.36165	3943.7	8.1742	.34769	3943.4	8.1566	.33476	3943.1	8.1395	.32276
720	3967.0	8.2158	.36539	3966.7	8.1975	.35128	3966.4	8.1798	.33823	3966.1	8.1628	.32610
730	3990.0	8.2389	.36912	3989.7	8.2206	.35488	3989.5	8.2029	.34169	3989.2	8.1859	.32944
740	4013.1	8.2618	.37286	4012.8	8.2435	.35847	4012.6	8.2258	.34515	4012.3	8.2088	.33278
750	4036.3	8.2845	.37659	4036.0	8.2662	.36206	4035.7	8.2486	.34861	4035.5	8.2316	.33612
760	4059.5	8.3071	.38033	4059.2	8.2888	.36566	4058.9	8.2712	.35207	4058.7	8.2542	.33946
770	4082.7	8.3295	.38406	4082.5	8.3112	.36924	4082.2	8.2936	.35553	4082.0	8.2766	.34279
780	4106.1	8.3518	.38779	4105.8	8.3335	.37283	4105.6	8.3159	.35899	4105.3	8.2989	.34613
790	4129.4	8.3739	.39152	4129.2	8.3556	.37642	4129.0	8.3380	.36244	4128.7	8.3210	.34946
800	4152.9	8.3958	.39524	4152.7	8.3775	.38000	4152.4	8.3599	.36589	4152.2	8.3430	.35279

TABLE 3 WATER AND STEAM

p(MPa)	= 1.450			= 1.500			= 1.550			= 1.600		
SAT t(°C)	196.69			198.29			199.85			201.37		
SAT.LIQ	837.5	2.2993	.0011514	844.7	2.3145	.0011539	851.7	2.3292	.0011563	858.6	2.3436	.0011586
SAT.VAP	2788.9	6.4526	.13604	2789.9	6.4406	.13166	2790.8	6.4289	.12755	2791.7	6.4175	.12369
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	1.4	-.0000	.0009995	1.5	-.0000	.0009995	1.5	-.0000	.0009994	1.6	-.0000	.0009994
10	43.4	.1509	.0009996	43.5	.1509	.0009995	43.5	.1509	.0009995	43.6	.1509	.0009995
20	85.2	.2960	.0010011	85.3	.2960	.0010010	85.3	.2960	.0010010	85.4	.2960	.0010010
30	127.0	.4361	.0010037	127.0	.4360	.0010036	127.1	.4360	.0010036	127.1	.4360	.0010036
40	168.7	.5716	.0010072	168.8	.5715	.0010071	168.8	.5715	.0010071	168.9	.5715	.0010071
50	210.5	.7028	.0010115	210.5	.7028	.0010114	210.6	.7028	.0010114	210.6	.7028	.0010114
60	252.3	.8302	.0010165	252.3	.8302	.0010165	252.4	.8302	.0010164	252.4	.8302	.0010164
70	294.1	.9540	.0010222	294.2	.9539	.0010222	294.2	.9539	.0010221	294.3	.9539	.0010221
80	336.0	1.0743	.0010285	336.1	1.0743	.0010285	336.1	1.0743	.0010285	336.1	1.0742	.0010284
90	378.0	1.1915	.0010355	378.0	1.1915	.0010354	378.1	1.1915	.0010354	378.1	1.1914	.0010354
100	420.1	1.3058	.0010430	420.1	1.3058	.0010430	420.2	1.3057	.0010429	420.2	1.3057	.0010429
110	462.3	1.4174	.0010511	462.3	1.4173	.0010511	462.3	1.4173	.0010511	462.4	1.4173	.0010511
120	504.6	1.5265	.0010599	504.6	1.5264	.0010599	504.7	1.5264	.0010598	504.7	1.5263	.0010598
130	547.1	1.6332	.0010693	547.1	1.6332	.0010693	547.2	1.6331	.0010692	547.2	1.6331	.0010692
140	589.8	1.7379	.0010794	589.8	1.7378	.0010793	589.9	1.7378	.0010793	589.9	1.7377	.0010793
150	632.8	1.8406	.0010901	632.8	1.8405	.0010901	632.8	1.8404	.0010900	632.8	1.8404	.0010900
160	676.0	1.9415	.0011016	676.0	1.9414	.0011016	676.0	1.9414	.0011015	676.0	1.9413	.0011015
170	719.5	2.0408	.0011139	719.5	2.0407	.0011139	719.5	2.0407	.0011138	719.6	2.0406	.0011138
180	763.3	2.1387	.0011271	763.4	2.1386	.0011271	763.4	2.1385	.0011270	763.4	2.1385	.0011270
190	807.6	2.2353	.0011413	807.6	2.2352	.0011413	807.7	2.2351	.0011412	807.7	2.2351	.0011412
200	2798.1	6.4722	.13748	2794.7	6.4508	.13238	2791.3	6.4298	.12761	852.4	2.3306	.0011564
210	2825.2	6.5288	.14173	2822.2	6.5082	.13654	2819.1	6.4880	.13168	2816.0	6.4682	.12712
220	2851.3	6.5824	.14585	2848.6	6.5624	.14056	2845.9	6.5428	.13562	2843.1	6.5237	.13098
230	2876.7	6.6334	.14985	2874.3	6.6139	.14447	2871.8	6.5949	.13943	2869.3	6.5763	.13470
240	2901.4	6.6820	.15375	2899.2	6.6630	.14827	2897.0	6.6444	.14314	2894.7	6.6263	.13833
250	2925.5	6.7286	.15757	2923.5	6.7099	.15199	2921.5	6.6917	.14677	2919.4	6.6740	.14187
260	2949.2	6.7733	.16132	2947.3	6.7550	.15564	2945.5	6.7372	.15032	2943.6	6.7198	.14534
270	2972.4	6.8165	.16501	2970.7	6.7985	.15923	2969.0	6.7809	.15382	2967.3	6.7638	.14874
280	2995.3	6.8583	.16865	2993.7	6.8405	.16276	2992.2	6.8232	.15725	2990.6	6.8063	.15209
290	3017.9	6.8988	.17224	3016.5	6.8812	.16625	3015.0	6.8641	.16065	3013.5	6.8474	.15539
300	3040.3	6.9381	.17579	3038.9	6.9207	.16970	3037.6	6.9038	.16400	3036.2	6.8873	.15866

TABLE 3 WATER AND STEAM

p(MPa) =	1.450			1.500			1.550			1.600		
SAT t(°C)	196.69			198.29			199.85			201.37		
SAT.LIQ	837.5	2.2993	.0011514	844.7	2.3145	.0011539	851.7	2.3292	.0011563	858.6	2.3436	.0011586
SAT.VAP	2788.9	6.4526	.13604	2789.9	6.4406	.13166	2790.8	6.4289	.12755	2791.7	6.4175	.12369
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3062.4	6.9765	.17931	3061.2	6.9592	.17312	3059.9	6.9424	.16732	3058.6	6.9261	.16189
320	3084.4	7.0139	.18281	3083.3	6.9967	.17651	3082.1	6.9801	.17061	3080.9	6.9639	.16509
330	3106.3	7.0504	.18628	3105.2	7.0334	.17987	3104.1	7.0169	.17388	3102.9	7.0008	.16826
340	3128.0	7.0862	.18972	3127.0	7.0693	.18321	3125.9	7.0529	.17712	3124.9	7.0369	.17141
350	3149.7	7.1212	.19315	3148.7	7.1044	.18653	3147.7	7.0881	.18034	3146.7	7.0723	.17454
360	3171.3	7.1556	.19656	3170.4	7.1389	.18984	3169.4	7.1227	.18355	3168.5	7.1069	.17766
370	3192.9	7.1894	.19995	3192.0	7.1727	.19313	3191.1	7.1566	.18674	3190.2	7.1409	.18075
380	3214.4	7.2226	.20333	3213.5	7.2060	.19640	3212.7	7.1899	.18992	3211.8	7.1743	.18384
390	3235.9	7.2553	.20670	3235.1	7.2387	.19967	3234.3	7.2227	.19308	3233.4	7.2071	.18691
400	3257.4	7.2874	.21006	3256.6	7.2709	.20292	3255.8	7.2550	.19624	3255.0	7.2394	.18997
410	3278.9	7.3191	.21341	3278.1	7.3027	.20616	3277.4	7.2867	.19938	3276.6	7.2713	.19302
420	3300.4	7.3504	.21675	3299.7	7.3340	.20940	3298.9	7.3181	.20252	3298.2	7.3026	.19606
430	3321.9	7.3812	.22008	3321.2	7.3648	.21262	3320.5	7.3490	.20564	3319.8	7.3336	.19910
440	3343.4	7.4116	.22341	3342.8	7.3953	.21584	3342.1	7.3794	.20876	3341.4	7.3641	.20213
450	3365.0	7.4416	.22672	3364.3	7.4253	.21905	3363.7	7.4095	.21187	3363.0	7.3942	.20515
460	3386.6	7.4713	.23004	3386.0	7.4550	.22226	3385.3	7.4392	.21498	3384.7	7.4240	.20816
470	3408.2	7.5006	.23334	3407.6	7.4843	.22546	3407.0	7.4686	.21808	3406.4	7.4534	.21117
480	3429.9	7.5295	.23664	3429.3	7.5133	.22865	3428.7	7.4976	.22118	3428.1	7.4824	.21417
490	3451.6	7.5582	.23994	3451.0	7.5420	.23184	3450.5	7.5263	.22427	3449.9	7.5111	.21717
500	3473.3	7.5865	.24323	3472.8	7.5703	.23503	3472.2	7.5547	.22735	3471.7	7.5395	.22016
510	3495.1	7.6145	.24651	3494.6	7.5984	.23821	3494.1	7.5827	.23043	3493.5	7.5676	.22315
520	3517.0	7.6422	.24980	3516.5	7.6261	.24138	3516.0	7.6105	.23351	3515.4	7.5954	.22613
530	3538.9	7.6697	.25307	3538.4	7.6536	.24455	3537.9	7.6380	.23658	3537.4	7.6229	.22911
540	3560.8	7.6968	.25635	3560.4	7.6808	.24772	3559.9	7.6652	.23965	3559.4	7.6501	.23208
550	3582.9	7.7237	.25962	3582.4	7.7077	.25089	3581.9	7.6921	.24272	3581.4	7.6770	.23506
560	3604.9	7.7504	.26289	3604.5	7.7343	.25405	3604.0	7.7188	.24578	3603.5	7.7037	.23803
570	3627.0	7.7768	.26615	3626.6	7.7607	.25721	3626.1	7.7452	.24884	3625.7	7.7301	.24099
580	3649.2	7.8029	.26941	3648.8	7.7869	.26036	3648.3	7.7714	.25189	3647.9	7.7563	.24395
590	3671.4	7.8288	.27267	3671.0	7.8128	.26351	3670.6	7.7973	.25495	3670.2	7.7823	.24691
600	3693.7	7.8545	.27593	3693.3	7.8385	.26666	3692.9	7.8230	.25800	3692.5	7.8080	.24987

TABLE 3 WATER AND STEAM

p(MPa)	1.450			1.500			1.550			1.600		
SAT t(°C)	196.69			198.29			199.85			201.37		
SAT.LIQ	837.5	2.2993	.0011514	844.7	2.3145	.0011539	851.7	2.3292	.0011563	858.6	2.3436	.0011586
SAT.VAP	2788.9	6.4526	.13604	2789.9	6.4406	.13166	2790.8	6.4289	.12755	2791.7	6.4175	.12369
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3716.1	7.8799	.27918	3715.7	7.8640	.26981	3715.3	7.8485	.26104	3714.9	7.8335	.25283
620	3738.5	7.9052	.28243	3738.1	7.8892	.27295	3737.7	7.8737	.26409	3737.3	7.8588	.25578
630	3760.9	7.9302	.28568	3760.6	7.9142	.27609	3760.2	7.8988	.26713	3759.8	7.8838	.25873
640	3783.5	7.9550	.28892	3783.1	7.9390	.27923	3782.7	7.9236	.27017	3782.4	7.9086	.26167
650	3806.1	7.9796	.29216	3805.7	7.9636	.28237	3805.3	7.9482	.27321	3805.0	7.9333	.26462
660	3828.7	8.0040	.29541	3828.4	7.9881	.28551	3828.0	7.9726	.27624	3827.7	7.9577	.26756
670	3851.4	8.0282	.29864	3851.1	8.0123	.28864	3850.7	7.9969	.27928	3850.4	7.9819	.27050
680	3874.2	8.0522	.30188	3873.8	8.0363	.29177	3873.5	8.0209	.28231	3873.2	8.0060	.27344
690	3897.0	8.0760	.30512	3896.7	8.0601	.29490	3896.4	8.0447	.28534	3896.0	8.0298	.27638
700	3919.9	8.0997	.30835	3919.6	8.0838	.29803	3919.3	8.0684	.28837	3918.9	8.0535	.27931
710	3942.8	8.1231	.31158	3942.5	8.1072	.30115	3942.2	8.0919	.29139	3941.9	8.0770	.28225
720	3965.8	8.1464	.31481	3965.5	8.1305	.30427	3965.2	8.1152	.29442	3964.9	8.1003	.28518
730	3988.9	8.1695	.31804	3988.6	8.1536	.30740	3988.3	8.1383	.29744	3988.0	8.1234	.28811
740	4012.0	8.1924	.32126	4011.7	8.1766	.31052	4011.4	8.1612	.30046	4011.2	8.1464	.29103
750	4035.2	8.2152	.32449	4034.9	8.1993	.31364	4034.6	8.1840	.30348	4034.4	8.1691	.29396
760	4058.4	8.2378	.32771	4058.2	8.2220	.31675	4057.9	8.2066	.30650	4057.6	8.1918	.29689
770	4081.7	8.2602	.33094	4081.5	8.2444	.31987	4081.2	8.2291	.30952	4081.0	8.2142	.29981
780	4105.1	8.2825	.33416	4104.8	8.2667	.32298	4104.6	8.2514	.31253	4104.3	8.2365	.30273
790	4128.5	8.3046	.33738	4128.2	8.2888	.32610	4128.0	8.2735	.31554	4127.8	8.2587	.30565
800	4152.0	8.3266	.34059	4151.7	8.3108	.32921	4151.5	8.2955	.31856	4151.3	8.2807	.30857

TABLE 3 WATER AND STEAM

p(MPa) =	1.650			1.700			1.750			1.800		
SAT t(°C)	202.86			204.31			205.72			207.11		
SAT.LIQ	865.3	2.3576	.0011610	871.8	2.3713	.0011633	878.3	2.3846	.0011656	884.6	2.3976	.0011678
SAT.VAP	2792.6	6.4065	.12005	2793.4	6.3957	.11662	2794.1	6.3853	.11338	2794.8	6.3751	.11032
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	1.6	-.0000	.0009994	1.7	-.0000	.0009994	1.7	-.0000	.0009993	1.8	.0000	.0009993
10	43.6	.1508	.0009995	43.7	.1508	.0009995	43.7	.1508	.0009994	43.7	.1508	.0009994
20	85.4	.2960	.0010010	85.5	.2959	.0010010	85.5	.2959	.0010009	85.6	.2959	.0010009
30	127.2	.4360	.0010036	127.2	.4360	.0010036	127.3	.4360	.0010035	127.3	.4360	.0010035
40	168.9	.5715	.0010071	168.9	.5715	.0010071	169.0	.5714	.0010070	169.0	.5714	.0010070
50	210.7	.7027	.0010114	210.7	.7027	.0010114	210.8	.7027	.0010113	210.8	.7027	.0010113
60	252.5	.8301	.0010164	252.5	.8301	.0010164	252.5	.8301	.0010164	252.6	.8300	.0010163
70	294.3	.9538	.0010221	294.3	.9538	.0010221	294.4	.9538	.0010220	294.4	.9538	.0010220
80	336.2	1.0742	.0010284	336.2	1.0742	.0010284	336.3	1.0741	.0010284	336.3	1.0741	.0010283
90	378.2	1.1914	.0010354	378.2	1.1913	.0010353	378.2	1.1913	.0010353	378.3	1.1913	.0010353
100	420.2	1.3057	.0010429	420.3	1.3056	.0010429	420.3	1.3056	.0010428	420.3	1.3055	.0010428
110	462.4	1.4172	.0010510	462.4	1.4172	.0010510	462.5	1.4171	.0010510	462.5	1.4171	.0010510
120	504.7	1.5263	.0010598	504.8	1.5262	.0010598	504.8	1.5262	.0010597	504.8	1.5261	.0010597
130	547.2	1.6330	.0010692	547.3	1.6330	.0010691	547.3	1.6329	.0010691	547.3	1.6329	.0010691
140	589.9	1.7376	.0010792	590.0	1.7376	.0010792	590.0	1.7375	.0010792	590.0	1.7375	.0010791
150	632.9	1.8403	.0010900	632.9	1.8403	.0010899	632.9	1.8402	.0010899	633.0	1.8402	.0010899
160	676.1	1.9412	.0011015	676.1	1.9412	.0011014	676.1	1.9411	.0011014	676.2	1.9411	.0011013
170	719.6	2.0405	.0011138	719.6	2.0405	.0011137	719.6	2.0404	.0011137	719.7	2.0404	.0011136
180	763.4	2.1384	.0011270	763.5	2.1383	.0011269	763.5	2.1383	.0011269	763.5	2.1382	.0011268
190	807.7	2.2353	.0011411	807.7	2.2349	.0011411	807.7	2.2349	.0011410	807.8	2.2348	.0011410
200	852.4	2.3305	.0011564	852.4	2.3304	.0011563	852.5	2.3304	.0011563	852.5	2.3303	.0011562
210	2812.9	6.4488	.12284	2809.7	6.4297	.11880	2806.5	6.4110	.11498	2803.3	6.3926	.11138
220	2840.3	6.5050	.12661	2837.5	6.4866	.12250	2834.6	6.4686	.11862	2831.7	6.4509	.11496
230	2866.8	6.5581	.13026	2864.2	6.5403	.12608	2861.6	6.5229	.12213	2859.1	6.5058	.11840
240	2892.4	6.6086	.13381	2890.1	6.5912	.12955	2887.8	6.5743	.12554	2885.4	6.5577	.12174
250	2917.4	6.6567	.13727	2915.3	6.6398	.13294	2913.2	6.6233	.12885	2911.0	6.6071	.12499
260	2941.7	6.7028	.14065	2939.8	6.6863	.13624	2937.9	6.6701	.13208	2935.9	6.6543	.12815
270	2965.6	6.7471	.14397	2963.8	6.7309	.13949	2962.1	6.7150	.13525	2960.3	6.6995	.13125
280	2989.0	6.7899	.14724	2987.4	6.7739	.14267	2985.8	6.7583	.13837	2984.1	6.7430	.13430
290	3012.1	6.8312	.15046	3010.6	6.8154	.14581	3009.1	6.8000	.14143	3007.6	6.7850	.13729
300	3034.8	6.8713	.15364	3033.5	6.8557	.14891	3032.1	6.8405	.14445	3030.7	6.8257	.14024

TABLE 3 WATER AND STEAM

p(MPa)	1.650			1.700			1.750			1.800		
SAT t(°C)	202.86			204.31			205.72			207.11		
SAT.LIQ	865.3	2.3576	.0011610	871.8	2.3713	.0011633	878.3	2.3846	.0011656	884.6	2.3976	.0011678
SAT.VAP	2792.6	6.4065	.12005	2793.4	6.3957	.11662	2794.1	6.3853	.11338	2794.8	6.3751	.11032
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3057.4	6.9103	.15678	3056.1	6.8948	.15197	3054.8	6.8798	.14744	3053.5	6.8651	.14316
320	3079.7	6.9482	.15989	3078.5	6.9329	.15501	3077.3	6.9180	.15040	3076.1	6.9035	.14605
330	3101.8	6.9853	.16298	3100.7	6.9701	.15801	3099.6	6.9553	.15333	3098.4	6.9409	.14890
340	3123.8	7.0214	.16605	3122.8	7.0064	.16100	3121.7	6.9917	.15624	3120.6	6.9774	.15174
350	3145.7	7.0569	.16909	3144.7	7.0419	.16396	3143.7	7.0273	.15912	3142.7	7.0131	.15455
360	3167.5	7.0916	.17212	3166.6	7.0767	.16691	3165.6	7.0622	.16199	3164.7	7.0481	.15735
370	3189.3	7.1257	.17513	3188.4	7.1108	.16984	3187.5	7.0964	.16484	3186.6	7.0824	.16013
380	3211.0	7.1591	.17813	3210.1	7.1444	.17275	3209.2	7.1300	.16768	3208.4	7.1160	.16290
390	3232.6	7.1920	.18111	3231.8	7.1773	.17565	3231.0	7.1630	.17051	3230.1	7.1491	.16565
400	3254.2	7.2244	.18409	3253.5	7.2098	.17855	3252.7	7.1955	.17332	3251.9	7.1816	.16839
410	3275.9	7.2563	.18705	3275.1	7.2417	.18143	3274.3	7.2275	.17613	3273.6	7.2137	.17112
420	3297.5	7.2877	.19001	3296.8	7.2731	.18430	3296.0	7.2590	.17892	3295.3	7.2452	.17385
430	3319.1	7.3187	.19295	3318.4	7.3041	.18717	3317.7	7.2900	.18171	3317.0	7.2763	.17656
440	3340.7	7.3492	.19589	3340.1	7.3347	.19002	3339.4	7.3207	.18449	3338.7	7.3070	.17927
450	3362.4	7.3794	.19882	3361.7	7.3649	.19287	3361.1	7.3509	.18726	3360.4	7.3372	.18197
460	3384.1	7.4091	.20175	3383.4	7.3947	.19572	3382.8	7.3807	.19003	3382.2	7.3671	.18466
470	3405.8	7.4385	.20467	3405.2	7.4242	.19856	3404.6	7.4102	.19279	3404.0	7.3966	.18735
480	3427.5	7.4676	.20759	3426.9	7.4533	.20139	3426.4	7.4393	.19555	3425.8	7.4257	.19003
490	3449.3	7.4963	.21049	3448.7	7.4820	.20422	3448.2	7.4681	.19830	3447.6	7.4545	.19271
500	3471.1	7.5248	.21340	3470.6	7.5105	.20704	3470.0	7.4965	.20104	3469.5	7.4830	.19538
510	3493.0	7.5529	.21630	3492.5	7.5386	.20986	3491.9	7.5247	.20378	3491.4	7.5112	.19805
520	3514.9	7.5807	.21920	3514.4	7.5664	.21267	3513.9	7.5525	.20652	3513.4	7.5391	.20071
530	3536.9	7.6082	.22209	3536.4	7.5939	.21548	3535.9	7.5801	.20925	3535.4	7.5666	.20337
540	3558.9	7.6354	.22498	3558.4	7.6212	.21829	3557.9	7.6074	.21198	3557.4	7.5939	.20602
550	3581.0	7.6624	.22786	3580.5	7.6482	.22109	3580.0	7.6344	.21471	3579.5	7.6209	.20868
560	3603.1	7.6891	.23074	3602.6	7.6749	.22389	3602.2	7.6611	.21743	3601.7	7.6477	.21132
570	3625.2	7.7155	.23362	3624.8	7.7014	.22669	3624.3	7.6876	.22015	3623.9	7.6742	.21397
580	3647.5	7.7417	.23650	3647.0	7.7276	.22948	3646.6	7.7138	.22286	3646.2	7.7004	.21661
590	3669.7	7.7677	.23937	3669.3	7.7536	.23227	3668.9	7.7398	.22557	3668.5	7.7264	.21925
600	3692.1	7.7934	.24224	3691.7	7.7793	.23506	3691.3	7.7656	.22828	3690.9	7.7522	.22189

TABLE 3 WATER AND STEAM

p(MPa) =	1.650			1.700			= 1.750			= 1.800		
SAT t(°C)	202.86			204.31			205.72			207.11		
SAT.LIQ	865.3	2.3576	.0011610	871.8	2.3713	.0011633	878.3	2.3846	.0011656	884.6	2.3976	.0011678
SAT.VAP	2792.6	6.4065	.12005	2793.4	6.3957	.11662	2794.1	6.3853	.11338	2794.8	6.3751	.11032
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3714.5	7.8189	.24511	3714.1	7.8048	.23784	3713.7	7.7911	.23099	3713.3	7.7778	.22452
620	3736.9	7.8442	.24797	3736.5	7.8301	.24062	3736.2	7.8164	.23370	3735.8	7.8031	.22715
630	3759.4	7.8693	.25083	3759.1	7.8552	.24340	3758.7	7.8415	.23640	3758.3	7.8282	.22978
640	3782.0	7.8941	.25369	3781.6	7.8800	.24618	3781.3	7.8664	.23910	3780.9	7.8531	.23241
650	3804.6	7.9188	.25655	3804.3	7.9047	.24896	3803.9	7.8910	.24180	3803.6	7.8777	.23503
660	3827.3	7.9432	.25941	3827.0	7.9291	.25173	3826.6	7.9155	.24449	3826.3	7.9022	.23766
670	3850.1	7.9675	.26226	3849.7	7.9534	.25450	3849.4	7.9397	.24718	3849.0	7.9265	.24028
680	3872.9	7.9915	.26511	3872.5	7.9775	.25727	3872.2	7.9638	.24988	3871.9	7.9505	.24289
690	3895.7	8.0154	.26796	3895.4	8.0013	.26004	3895.1	7.9877	.25257	3894.8	7.9744	.24551
700	3918.6	8.0390	.27081	3918.3	8.0250	.26280	3918.0	8.0114	.25525	3917.7	7.9981	.24812
710	3941.6	8.0625	.27365	3941.3	8.0485	.26556	3941.0	8.0349	.25794	3940.7	8.0217	.25074
720	3964.6	8.0858	.27650	3964.4	8.0718	.26833	3964.1	8.0582	.26062	3963.8	8.0450	.25335
730	3987.7	8.1090	.27934	3987.5	8.0950	.27109	3987.2	8.0814	.26330	3986.9	8.0682	.25596
740	4010.9	8.1319	.28218	4010.6	8.1179	.27384	4010.3	8.1044	.26599	4010.1	8.0911	.25856
750	4034.1	8.1547	.28502	4033.8	8.1408	.27660	4033.6	8.1272	.26866	4033.3	8.1140	.26117
760	4057.4	8.1774	.28786	4057.1	8.1634	.27936	4056.9	8.1498	.27134	4056.6	8.1366	.26377
770	4080.7	8.1998	.29069	4080.4	8.1859	.28211	4080.2	8.1723	.27402	4079.9	8.1591	.26638
780	4104.1	8.2221	.29353	4103.8	8.2082	.28486	4103.6	8.1946	.27669	4103.3	8.1814	.26898
790	4127.5	8.2443	.29636	4127.3	8.2303	.28761	4127.0	8.2168	.27937	4126.8	8.2036	.27158
800	4151.0	8.2663	.29919	4150.8	8.2523	.29036	4150.6	8.2388	.28204	4150.3	8.2256	.27418

TABLE 3 WATER AND STEAM

p(MPa) =	1.850			= 1.900			= 1.950			= 2.000		
SAT t(°C)	208.47			209.80			211.10			212.37		
SAT.LIQ	890.7	2.4103	.0011701	896.8	2.4228	.0011723	902.8	2.4349	.0011744	908.6	2.4469	.0011766
SAT.VAP	2795.5	6.3651	.10741	2796.1	6.3554	.10465	2796.7	6.3459	.10203	2797.2	6.3367	.09954
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	1.8	.0000	.0009993	1.9	.0000	.0009993	2.0	.0000	.0009992	2.0	.0000	.0009992
10	43.8	.1508	.0009994	43.8	.1508	.0009994	43.9	.1508	.0009993	43.9	.1508	.0009993
20	85.6	.2959	.0010009	85.6	.2959	.0010009	85.7	.2959	.0010008	85.7	.2959	.0010008
30	127.3	.4359	.0010035	127.4	.4359	.0010035	127.4	.4359	.0010034	127.5	.4359	.0010034
40	169.1	.5714	.0010070	169.1	.5714	.0010070	169.2	.5714	.0010069	169.2	.5713	.0010069
50	210.8	.7027	.0010113	210.9	.7026	.0010113	210.9	.7026	.0010112	211.0	.7026	.0010112
60	252.6	.8300	.0010163	252.7	.8300	.0010163	252.7	.8300	.0010163	252.7	.8299	.0010162
70	294.5	.9537	.0010220	294.5	.9537	.0010220	294.5	.9537	.0010220	294.6	.9536	.0010219
80	336.3	1.0741	.0010283	336.4	1.0740	.0010283	336.4	1.0740	.0010283	336.5	1.0740	.0010282
90	378.3	1.1912	.0010353	378.4	1.1912	.0010352	378.4	1.1912	.0010352	378.4	1.1911	.0010352
100	420.4	1.3055	.0010428	420.4	1.3055	.0010428	420.5	1.3054	.0010427	420.5	1.3054	.0010427
110	462.6	1.4170	.0010509	462.6	1.4170	.0010509	462.6	1.4170	.0010509	462.7	1.4169	.0010508
120	504.9	1.5261	.0010597	504.9	1.5260	.0010596	505.0	1.5260	.0010596	505.0	1.5260	.0010596
130	547.4	1.6328	.0010691	547.4	1.6328	.0010690	547.4	1.6327	.0010690	547.5	1.6327	.0010690
140	590.1	1.7374	.0010791	590.1	1.7374	.0010791	590.1	1.7373	.0010790	590.2	1.7373	.0010790
150	633.0	1.8401	.0010898	633.0	1.8401	.0010898	633.1	1.8400	.0010898	633.1	1.8399	.0010897
160	676.2	1.9410	.0011013	676.2	1.9409	.0011013	676.3	1.9409	.0011012	676.3	1.9408	.0011012
170	719.7	2.0403	.0011136	719.7	2.0402	.0011136	719.8	2.0402	.0011135	719.8	2.0401	.0011135
180	763.5	2.1381	.0011268	763.6	2.1381	.0011267	763.6	2.1380	.0011267	763.6	2.1379	.0011267
190	807.8	2.2347	.0011409	807.8	2.2346	.0011409	807.8	2.2346	.0011408	807.9	2.2345	.0011408
200	852.5	2.3302	.0011562	852.5	2.3301	.0011561	852.5	2.3300	.0011561	852.6	2.3300	.0011560
210	2800.0	6.3745	.10796	2796.7	6.3567	.10473	897.7	2.4246	.0011726	897.8	2.4245	.0011725
220	2828.8	6.4335	.11148	2825.9	6.4164	.10819	2822.9	6.3995	.10506	2819.9	6.3829	.10209
230	2856.4	6.4890	.11487	2853.8	6.4725	.11152	2851.1	6.4562	.10834	2848.4	6.4403	.10532
240	2883.1	6.5414	.11815	2880.7	6.5254	.11474	2878.3	6.5097	.11151	2875.9	6.4943	.10843
250	2908.9	6.5912	.12133	2906.7	6.5757	.11787	2904.6	6.5604	.11458	2902.4	6.5454	.11145
260	2934.0	6.6388	.12443	2932.0	6.6236	.12091	2930.1	6.6087	.11756	2928.1	6.5941	.11438
270	2958.5	6.6843	.12747	2956.7	6.6694	.12388	2954.9	6.6549	.12048	2953.1	6.6406	.11724
280	2982.5	6.7281	.13045	2980.9	6.7135	.12680	2979.2	6.6992	.12333	2977.5	6.6852	.12004
290	3006.1	6.7703	.13337	3004.6	6.7559	.12966	3003.0	6.7419	.12614	3001.5	6.7281	.12279
300	3029.3	6.8112	.13626	3027.9	6.7970	.13249	3026.5	6.7831	.12890	3025.0	6.7696	.12550

TABLE 3 WATER AND STEAM

p(MPa) =	1.850			1.900			1.950			= 2.000		
SAT t(°C)	208.47			209.80			211.10			212.37		
SAT.LIQ	890.7	2.4103	.0011701	896.8	2.4228	.0011723	902.8	2.4349	.0011744	908.6	2.4469	.0011766
SAT.VAP	2795.5	6.3651	.10741	2796.1	6.3554	.10465	2796.7	6.3459	.10203	2797.2	6.3367	.09954
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3052.2	6.8508	.13911	3050.9	6.8368	.13527	3049.6	6.8231	.13163	3048.2	6.8097	.12817
320	3074.8	6.8893	.14193	3073.6	6.8755	.13803	3072.4	6.8619	.13432	3071.2	6.8487	.13081
330	3097.3	6.9268	.14472	3096.1	6.9131	.14075	3095.0	6.8997	.13699	3093.8	6.8866	.13341
340	3119.6	6.9635	.14748	3118.5	6.9498	.14345	3117.4	6.9365	.13963	3116.3	6.9235	.13600
350	3141.7	6.9993	.15023	3140.7	6.9857	.14614	3139.7	6.9725	.14225	3138.6	6.9596	.13856
360	3163.7	7.0343	.15296	3162.8	7.0209	.14880	3161.8	7.0078	.14485	3160.8	6.9950	.14110
370	3185.6	7.0687	.15567	3184.7	7.0553	.15144	3183.8	7.0423	.14744	3182.9	7.0296	.14363
380	3207.5	7.1024	.15837	3206.6	7.0891	.15408	3205.8	7.0762	.15001	3204.9	7.0635	.14614
390	3229.3	7.1356	.16105	3228.5	7.1223	.15670	3227.6	7.1094	.15256	3226.8	7.0968	.14864
400	3251.1	7.1681	.16373	3250.3	7.1550	.15930	3249.5	7.1421	.15511	3248.7	7.1296	.15113
410	3272.8	7.2002	.16639	3272.1	7.1871	.16190	3271.3	7.1743	.15765	3270.5	7.1618	.15360
420	3294.6	7.2318	.16904	3293.8	7.2187	.16449	3293.1	7.2059	.16017	3292.4	7.1935	.15607
430	3316.3	7.2629	.17169	3315.6	7.2499	.16707	3314.9	7.2372	.16269	3314.2	7.2247	.15853
440	3338.0	7.2936	.17432	3337.4	7.2806	.16964	3336.7	7.2679	.16520	3336.0	7.2555	.16098
450	3359.8	7.3239	.17696	3359.1	7.3109	.17221	3358.5	7.2983	.16770	3357.8	7.2859	.16342
460	3381.6	7.3538	.17958	3380.9	7.3409	.17477	3380.3	7.3282	.17020	3379.7	7.3159	.16586
470	3403.4	7.3833	.18220	3402.7	7.3704	.17732	3402.1	7.3578	.17269	3401.5	7.3455	.16829
480	3425.2	7.4125	.18481	3424.6	7.3996	.17987	3424.0	7.3871	.17517	3423.4	7.3748	.17072
490	3447.0	7.4413	.18742	3446.5	7.4285	.18241	3445.9	7.4159	.17765	3445.3	7.4037	.17314
500	3468.9	7.4698	.19002	3468.4	7.4570	.18494	3467.8	7.4445	.18013	3467.3	7.4323	.17555
510	3490.9	7.4980	.19262	3490.3	7.4852	.18748	3489.8	7.4727	.18260	3489.3	7.4605	.17797
520	3512.8	7.5259	.19521	3512.3	7.5131	.19001	3511.8	7.5007	.18507	3511.3	7.4885	.18037
530	3534.9	7.5535	.19780	3534.4	7.5407	.19253	3533.9	7.5283	.18753	3533.4	7.5161	.18278
540	3556.9	7.5808	.20039	3556.5	7.5681	.19505	3556.0	7.5556	.18999	3555.5	7.5435	.18518
550	3579.1	7.6079	.20297	3578.6	7.5951	.19757	3578.1	7.5827	.19244	3577.6	7.5706	.18757
560	3601.2	7.6346	.20555	3600.8	7.6219	.20008	3600.3	7.6095	.19489	3599.9	7.5974	.18996
570	3623.5	7.6611	.20813	3623.0	7.6484	.20259	3622.6	7.6361	.19734	3622.1	7.6240	.19235
580	3645.7	7.6874	.21070	3645.3	7.6747	.20510	3644.9	7.6623	.19979	3644.4	7.6503	.19474
590	3668.1	7.7134	.21327	3667.6	7.7008	.20760	3667.2	7.6884	.20223	3666.8	7.6763	.19712
600	3690.4	7.7392	.21584	3690.0	7.7265	.21011	3689.6	7.7142	.20467	3689.2	7.7022	.19950

TABLE 3 WATER AND STEAM

p(MPa) =	1.850			1.900			1.950			2.000		
SAT t(°C)	208.47			209.80			211.10			212.37		
SAT.LIQ	890.7	2.4103	.0011701	896.8	2.4228	.0011723	902.8	2.4349	.0011744	908.6	2.4469	.0011766
SAT.VAP	2795.5	6.3651	.10741	2796.1	6.3554	.10465	2796.7	6.3459	.10203	2797.2	6.3367	.09954
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3712.9	7.7648	.21840	3712.5	7.7521	.21260	3712.1	7.7398	.20710	3711.7	7.7278	.20188
620	3735.4	7.7901	.22096	3735.0	7.7775	.21510	3734.6	7.7651	.20954	3734.2	7.7531	.20425
630	3757.9	7.8152	.22352	3757.6	7.8026	.21760	3757.2	7.7903	.21197	3756.8	7.7783	.20663
640	3780.5	7.8401	.22608	3780.2	7.8275	.22009	3779.8	7.8152	.21440	3779.4	7.8032	.20900
650	3803.2	7.8648	.22864	3802.8	7.8522	.22258	3802.5	7.8399	.21683	3802.1	7.8279	.21136
660	3825.9	7.8893	.23119	3825.6	7.8767	.22506	3825.2	7.8644	.21925	3824.9	7.8524	.21373
670	3848.7	7.9136	.23374	3848.4	7.9010	.22755	3848.0	7.8887	.22167	3847.7	7.8767	.21609
680	3871.5	7.9376	.23629	3871.2	7.9251	.23003	3870.9	7.9128	.22410	3870.6	7.9009	.21846
690	3894.4	7.9615	.23884	3894.1	7.9490	.23251	3893.8	7.9367	.22651	3893.5	7.9248	.22082
700	3917.4	7.9852	.24138	3917.1	7.9727	.23499	3916.8	7.9605	.22893	3916.5	7.9485	.22317
710	3940.4	8.0088	.24392	3940.1	7.9962	.23747	3939.8	7.9840	.23135	3939.5	7.9721	.22553
720	3963.5	8.0321	.24647	3963.2	8.0196	.23995	3962.9	8.0074	.23376	3962.6	7.9954	.22788
730	3986.6	8.0553	.24901	3986.3	8.0428	.24242	3986.0	8.0305	.23617	3985.7	8.0186	.23024
740	4009.8	8.0783	.25154	4009.5	8.0658	.24489	4009.2	8.0536	.23858	4009.0	8.0417	.23259
750	4033.0	8.1011	.25408	4032.8	8.0886	.24736	4032.5	8.0764	.24099	4032.2	8.0645	.23494
760	4056.3	8.1238	.25662	4056.1	8.1113	.24983	4055.8	8.0991	.24340	4055.5	8.0872	.23729
770	4079.7	8.1463	.25915	4079.4	8.1338	.25230	4079.2	8.1216	.24580	4078.9	8.1097	.23963
780	4103.1	8.1686	.26168	4102.8	8.1561	.25477	4102.6	8.1439	.24821	4102.3	8.1321	.24198
790	4126.6	8.1908	.26421	4126.3	8.1783	.25723	4126.1	8.1661	.25061	4125.8	8.1543	.24432
800	4150.1	8.2128	.26674	4149.8	8.2003	.25970	4149.6	8.1882	.25301	4149.4	8.1763	.24666

TABLE 3 WATER AND STEAM

p(MPa) =	2.100			2.200			= 2.300			= 2.400		
SAT t(°C)	214.85			217.24			219.55			221.78		
SAT.LIQ	920.0	2.4700	.0011809	931.0	2.4922	.0011850	941.6	2.5136	.0011892	951.9	2.5343	.0011932
SAT.VAP	2798.2	6.3187	.09489	2799.1	6.3015	.09065	2799.8	6.2849	.08677	2800.4	6.2690	.08320
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	2.1	.0000	.0009992	2.2	.0000	.0009991	2.3	.0000	.0009991	2.4	.0000	.0009990
10	44.0	.1508	.0009993	44.1	.1508	.0009992	44.2	.1508	.0009992	44.3	.1508	.0009991
20	85.8	.2959	.0010008	85.9	.2958	.0010007	86.0	.2958	.0010007	86.1	.2958	.0010006
30	127.6	.4359	.0010034	127.7	.4358	.0010033	127.8	.4358	.0010033	127.8	.4358	.0010032
40	169.3	.5713	.0010069	169.4	.5713	.0010068	169.5	.5712	.0010068	169.6	.5712	.0010067
50	211.1	.7025	.0010112	211.1	.7025	.0010111	211.2	.7024	.0010111	211.3	.7024	.0010110
60	252.8	.8299	.0010162	252.9	.8298	.0010161	253.0	.8298	.0010161	253.1	.8297	.0010161
70	294.7	.9536	.0010219	294.7	.9535	.0010218	294.8	.9535	.0010218	294.9	.9534	.0010217
80	336.5	1.0739	.0010282	336.6	1.0738	.0010282	336.7	1.0738	.0010281	336.8	1.0737	.0010281
90	378.5	1.1911	.0010351	378.6	1.1910	.0010351	378.7	1.1909	.0010350	378.7	1.1908	.0010350
100	420.6	1.3053	.0010427	420.6	1.3052	.0010426	420.7	1.3051	.0010426	420.8	1.3051	.0010425
110	462.7	1.4168	.0010508	462.8	1.4168	.0010507	462.9	1.4167	.0010507	463.0	1.4166	.0010506
120	505.1	1.5259	.0010595	505.1	1.5258	.0010595	505.2	1.5257	.0010594	505.3	1.5256	.0010594
130	547.5	1.6326	.0010689	547.6	1.6325	.0010688	547.7	1.6324	.0010688	547.7	1.6323	.0010687
140	590.2	1.7372	.0010789	590.3	1.7371	.0010789	590.4	1.7370	.0010788	590.4	1.7369	.0010787
150	633.2	1.8398	.0010897	633.2	1.8397	.0010896	633.3	1.8396	.0010895	633.3	1.8395	.0010894
160	676.3	1.9407	.0011011	676.4	1.9406	.0011011	676.5	1.9405	.0011010	676.5	1.9403	.0011009
170	719.8	2.0400	.0011134	719.9	2.0398	.0011133	719.9	2.0397	.0011132	720.0	2.0396	.0011132
180	763.7	2.1378	.0011266	763.7	2.1377	.0011265	763.8	2.1375	.0011264	763.8	2.1374	.0011263
190	807.9	2.2343	.0011407	808.0	2.2342	.0011406	808.0	2.2340	.0011405	808.0	2.2339	.0011404
200	852.6	2.3298	.0011559	852.6	2.3296	.0011558	852.7	2.3295	.0011557	852.7	2.3293	.0011556
210	897.8	2.4243	.0011724	897.8	2.4242	.0011723	897.9	2.4240	.0011722	897.9	2.4238	.0011720
220	2813.8	6.3504	.096560	2807.5	6.3187	.091520	2801.2	6.2878	.086907	943.7	2.5176	.0011899
230	2843.0	6.4091	.099700	2837.4	6.3787	.094581	2831.8	6.3491	.089897	2826.0	6.3202	.085595
240	2871.0	6.4642	.10272	2866.0	6.4349	.097517	2860.9	6.4065	.092759	2855.7	6.3788	.088390
250	2897.9	6.5162	.10564	2893.4	6.4879	.10035	2888.9	6.4605	.095513	2884.2	6.4338	.091075
260	2924.0	6.5656	.10847	2920.0	6.5382	.10309	2915.8	6.5115	.098177	2911.6	6.4857	.093666
270	2949.4	6.6128	.11123	2945.7	6.5860	.10576	2941.9	6.5600	.10076	2938.1	6.5349	.096180
280	2974.2	6.6580	.11393	2970.8	6.6317	.10837	2967.3	6.6064	.10329	2963.8	6.5818	.098626
290	2998.4	6.7014	.11658	2995.3	6.6756	.11092	2992.1	6.6508	.10576	2988.9	6.6267	.10102
300	3022.2	6.7432	.11918	3019.3	6.7179	.11343	3016.4	6.6935	.10818	3013.4	6.6699	.10336

TABLE 3 WATER AND STEAM

p(MPa) =	2.100			2.200			= 2.300			= 2.400		
SAT t(°C)	214.85			217.24			219.55			221.78		
SAT.LIQ	920.0	2.4700	.0011809	931.0	2.4922	.0011850	941.6	2.5136	.0011892	951.9	2.5343	.0011932
SAT.VAP	2798.2	6.3187	.09489	2799.1	6.3015	.09065	2799.8	6.2849	.08677	2800.4	6.2690	.08320
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3045.6	6.7837	.12174	3042.9	6.7588	.11590	3040.2	6.7347	.11056	3037.5	6.7115	.10566
320	3068.7	6.8230	.12427	3066.2	6.7983	.11833	3063.7	6.7746	.11290	3061.1	6.7517	.10793
330	3091.5	6.8612	.12677	3089.2	6.8368	.12073	3086.8	6.8133	.11522	3084.5	6.7907	.11016
340	3114.1	6.8984	.12925	3112.0	6.8742	.12311	3109.7	6.8510	.11751	3107.5	6.8286	.11237
350	3136.6	6.9347	.13170	3134.5	6.9107	.12547	3132.4	6.8877	.11977	3130.4	6.8656	.11455
360	3158.9	6.9702	.13414	3156.9	6.9464	.12780	3155.0	6.9236	.12202	3153.0	6.9016	.11672
370	3181.1	7.0049	.13655	3179.2	6.9813	.13012	3177.3	6.9587	.12425	3175.5	6.9369	.11887
380	3203.1	7.0390	.13896	3201.4	7.0155	.13243	3199.6	6.9930	.12646	3197.8	6.9714	.12100
390	3225.1	7.0724	.14135	3223.5	7.0491	.13472	3221.8	7.0267	.12867	3220.1	7.0052	.12312
400	3247.1	7.1053	.14373	3245.5	7.0821	.13700	3243.9	7.0598	.13085	3242.3	7.0384	.12522
410	3269.0	7.1376	.14609	3267.5	7.1145	.13927	3265.9	7.0923	.13303	3264.4	7.0710	.12732
420	3290.9	7.1694	.14845	3289.4	7.1464	.14152	3288.0	7.1243	.13520	3286.5	7.1031	.12940
430	3312.8	7.2007	.15080	3311.4	7.1778	.14377	3310.0	7.1558	.13736	3308.5	7.1347	.13148
440	3334.6	7.2316	.15314	3333.3	7.2088	.14602	3331.9	7.1868	.13951	3330.6	7.1658	.13355
450	3356.5	7.2621	.15548	3355.2	7.2393	.14825	3353.9	7.2174	.14165	3352.6	7.1964	.13561
460	3378.4	7.2921	.15780	3377.1	7.2694	.15048	3375.9	7.2476	.14379	3374.6	7.2267	.13766
470	3400.3	7.3218	.16013	3399.1	7.2991	.15270	3397.9	7.2774	.14592	3396.6	7.2565	.13971
480	3422.2	7.3511	.16244	3421.1	7.3285	.15492	3419.9	7.3068	.14805	3418.7	7.2860	.14175
490	3444.2	7.3801	.16475	3443.0	7.3575	.15713	3441.9	7.3359	.15017	3440.8	7.3151	.14379
500	3466.2	7.4087	.16706	3465.1	7.3862	.15934	3464.0	7.3646	.15228	3462.9	7.3439	.14582
510	3488.2	7.4370	.16936	3487.1	7.4145	.16154	3486.0	7.3930	.15439	3485.0	7.3723	.14785
520	3510.3	7.4650	.17166	3509.2	7.4425	.16373	3508.2	7.4211	.15650	3507.1	7.4004	.14987
530	3532.4	7.4927	.17395	3531.3	7.4703	.16593	3530.3	7.4488	.15860	3529.3	7.4282	.15189
540	3554.5	7.5201	.17624	3553.5	7.4977	.16812	3552.5	7.4763	.16070	3551.6	7.4558	.15390
550	3576.7	7.5472	.17853	3575.7	7.5249	.17030	3574.8	7.5035	.16280	3573.8	7.4830	.15591
560	3598.9	7.5741	.18081	3598.0	7.5518	.17249	3597.1	7.5304	.16489	3596.2	7.5099	.15792
570	3621.2	7.6007	.18309	3620.3	7.5784	.17467	3619.4	7.5571	.16698	3618.5	7.5366	.15993
580	3643.6	7.6270	.18536	3642.7	7.6048	.17684	3641.8	7.5835	.16906	3640.9	7.5631	.16193
590	3665.9	7.6531	.18764	3665.1	7.6309	.17901	3664.3	7.6096	.17114	3663.4	7.5892	.16393
600	3688.4	7.6789	.18991	3687.6	7.6568	.18119	3686.7	7.6355	.17322	3685.9	7.6152	.16592

TABLE 3 WATER AND STEAM

p(MPa) =	2.100			2.200			2.300			2.400		
SAT t(°C)	214.85			217.24			219.55			221.78		
SAT.LIQ	920.0	2.4700	.0011809	931.0	2.4922	.0011850	941.6	2.5136	.0011892	951.9	2.5343	.0011932
SAT.VAP	2798.2	6.3187	.09489	2799.1	6.3015	.09065	2799.8	6.2849	.08677	2800.4	6.2690	.08320
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3710.9	7.7046	.19217	3710.1	7.6824	.18335	3709.3	7.6612	.17530	3708.5	7.6409	.16791
620	3733.4	7.7299	.19444	3732.7	7.7078	.18552	3731.9	7.6866	.17737	3731.1	7.6663	.16991
630	3756.0	7.7551	.19670	3755.3	7.7330	.18768	3754.5	7.7119	.17944	3753.8	7.6916	.17189
640	3778.7	7.7801	.19896	3778.0	7.7580	.18984	3777.2	7.7368	.18151	3776.5	7.7166	.17388
650	3801.4	7.8048	.20122	3800.7	7.7827	.19200	3800.0	7.7616	.18358	3799.3	7.7414	.17586
660	3824.2	7.8293	.20348	3823.5	7.8073	.19416	3822.8	7.7862	.18564	3822.1	7.7660	.17784
670	3847.0	7.8537	.20573	3846.3	7.8317	.19631	3845.7	7.8106	.18771	3845.0	7.7904	.17982
680	3869.9	7.8778	.20798	3869.2	7.8558	.19846	3868.6	7.8348	.18977	3867.9	7.8146	.18180
690	3892.8	7.9018	.21023	3892.2	7.8798	.20061	3891.6	7.8587	.19183	3890.9	7.8386	.18377
700	3915.8	7.9255	.21248	3915.2	7.9035	.20276	3914.6	7.8825	.19388	3914.0	7.8624	.18575
710	3938.9	7.9491	.21473	3938.3	7.9271	.20491	3937.7	7.9061	.19594	3937.1	7.8860	.18772
720	3962.0	7.9725	.21697	3961.4	7.9505	.20705	3960.8	7.9296	.19799	3960.3	7.9095	.18969
730	3985.2	7.9957	.21921	3984.6	7.9738	.20919	3984.0	7.9528	.20004	3983.5	7.9327	.19166
740	4008.4	8.0187	.22146	4007.8	7.9968	.21133	4007.3	7.9759	.20209	4006.7	7.9558	.19362
750	4031.7	8.0416	.22370	4031.1	8.0197	.21347	4030.6	7.9988	.20414	4030.1	7.9787	.19559
760	4055.0	8.0643	.22593	4054.5	8.0424	.21561	4054.0	8.0215	.20619	4053.4	8.0015	.19755
770	4078.4	8.0868	.22817	4077.9	8.0650	.21775	4077.4	8.0441	.20824	4076.9	8.0240	.19951
780	4101.9	8.1092	.23041	4101.4	8.0873	.21989	4100.9	8.0665	.21028	4100.4	8.0464	.20148
790	4125.4	8.1314	.23264	4124.9	8.1096	.22202	4124.4	8.0887	.21232	4123.9	8.0687	.20344
800	4148.9	8.1534	.23487	4148.4	8.1316	.22415	4148.0	8.1108	.21437	4147.5	8.0908	.20539

TABLE 3 WATER AND STEAM

p(MPa) =	2.500			2.600			2.700			2.800		
SAT t(°C)	223.94			226.04			228.07			230.05		
SAT.LIQ	962.0	2.5543	.0011972	971.7	2.5736	.0012011	981.2	2.5924	.0012050	990.5	2.6106	.0012088
SAT.VAP	2800.9	6.2536	.07991	2801.4	6.2387	.07686	2801.7	6.2244	.07402	2802.0	6.2104	.07139
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	2.5	.0000	.0009990	2.6	.0001	.0009989	2.7	.0001	.0009989	2.8	.0001	.0009988
10	44.4	.1508	.0009991	44.5	.1508	.0009990	44.6	.1508	.0009990	44.7	.1507	.0009989
20	86.2	.2958	.0010006	86.3	.2958	.0010005	86.4	.2957	.0010005	86.5	.2957	.0010005
30	127.9	.4357	.0010032	128.0	.4357	.0010032	128.1	.4357	.0010031	128.2	.4356	.0010031
40	169.7	.5711	.0010067	169.7	.5711	.0010067	169.8	.5711	.0010066	169.9	.5710	.0010066
50	211.4	.7023	.0010110	211.5	.7023	.0010110	211.6	.7023	.0010109	211.7	.7022	.0010109
60	253.2	.8297	.0010160	253.3	.8296	.0010160	253.3	.8295	.0010159	253.4	.8295	.0010159
70	295.0	.9533	.0010217	295.1	.9533	.0010216	295.1	.9532	.0010216	295.2	.9532	.0010216
80	336.9	1.0736	.0010280	336.9	1.0736	.0010280	337.0	1.0735	.0010279	337.1	1.0734	.0010279
90	378.8	1.1908	.0010349	378.9	1.1907	.0010349	379.0	1.1906	.0010348	379.0	1.1906	.0010348
100	420.9	1.3050	.0010425	420.9	1.3049	.0010424	421.0	1.3048	.0010423	421.1	1.3048	.0010423
110	463.0	1.4165	.0010506	463.1	1.4164	.0010505	463.2	1.4163	.0010505	463.2	1.4162	.0010504
120	505.3	1.5255	.0010593	505.4	1.5254	.0010592	505.5	1.5253	.0010592	505.5	1.5252	.0010591
130	547.8	1.6322	.0010687	547.9	1.6321	.0010686	548.0	1.6320	.0010685	548.0	1.6319	.0010685
140	590.5	1.7368	.0010787	590.6	1.7367	.0010786	590.6	1.7366	.0010785	590.7	1.7365	.0010785
150	633.4	1.8394	.0010894	633.5	1.8393	.0010893	633.5	1.8392	.0010892	633.6	1.8391	.0010892
160	676.6	1.9402	.0011008	676.6	1.9401	.0011008	676.7	1.9400	.0011007	676.8	1.9399	.0011006
170	720.1	2.0395	.0011131	720.1	2.0393	.0011130	720.2	2.0392	.0011129	720.2	2.0391	.0011128
180	763.9	2.1372	.0011262	763.9	2.1371	.0011261	764.0	2.1370	.0011260	764.0	2.1368	.0011260
190	808.1	2.2338	.0011403	808.1	2.2336	.0011402	808.2	2.2335	.0011401	808.2	2.2333	.0011400
200	852.8	2.3292	.0011555	852.8	2.3290	.0011554	852.8	2.3288	.0011553	852.9	2.3287	.0011552
210	897.9	2.4237	.0011719	898.0	2.4235	.0011718	898.0	2.4233	.0011717	898.0	2.4231	.0011716
220	943.7	2.5175	.0011897	943.8	2.5173	.0011896	943.8	2.5171	.0011895	943.8	2.5169	.0011893
230	2820.1	6.2920	.081628	2814.1	6.2642	.077957	2808.0	6.2369	.074549	990.3	2.6102	.0012087
240	2850.5	6.3517	.084364	2845.2	6.3253	.080640	2839.7	6.2993	.077185	2834.2	6.2738	.073970
250	2879.5	6.4077	.086985	2874.7	6.3823	.083205	2869.9	6.3575	.079698	2864.9	6.3331	.076437
260	2907.4	6.4605	.089511	2903.0	6.4360	.085671	2898.7	6.4120	.082111	2894.2	6.3886	.078800
270	2934.2	6.5104	.091957	2930.3	6.4867	.088055	2926.4	6.4635	.084439	2922.3	6.4408	.081077
280	2960.3	6.5580	.094335	2956.7	6.5348	.090370	2953.1	6.5123	.086695	2949.5	6.4903	.083280
290	2985.7	6.6034	.096654	2982.4	6.5808	.092625	2979.1	6.5588	.088891	2975.7	6.5374	.085421
300	3010.4	6.6470	.098925	3007.4	6.6249	.094830	3004.4	6.6034	.091036	3001.3	6.5824	.087510

TABLE 3 WATER AND STEAM

p(MPa) =	2.500			2.600			2.700			2.800		
SAT t(°C)	223.94			226.04			228.07			230.05		
SAT.LIQ	962.0	2.5543	.0011972	971.7	2.5736	.0012011	981.2	2.5924	.0012050	990.5	2.6106	.0012088
SAT.VAP	2800.9	6.2536	.07991	2801.4	6.2387	.07686	2801.7	6.2244	.07402	2802.0	6.2104	.07139
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3034.7	6.6890	.10115	3031.9	6.6673	.096992	3029.1	6.6462	.093136	3026.3	6.6256	.089554
320	3058.6	6.7296	.10335	3056.0	6.7082	.099117	3053.4	6.6874	.095199	3050.8	6.6672	.091560
330	3082.1	6.7689	.10551	3079.7	6.7478	.10121	3077.2	6.7273	.097229	3074.8	6.7074	.093532
340	3105.3	6.8071	.10764	3103.0	6.7862	.10328	3100.8	6.7660	.099232	3098.5	6.7464	.095476
350	3128.2	6.8442	.10975	3126.1	6.8236	.10532	3124.0	6.8036	.10121	3121.9	6.7842	.097395
360	3151.0	6.8804	.11184	3149.0	6.8600	.10734	3147.0	6.8402	.10317	3145.0	6.8210	.099293
370	3173.6	6.9158	.11391	3171.7	6.8956	.10934	3169.8	6.8759	.10510	3167.9	6.8570	.10117
380	3196.1	6.9505	.11597	3194.3	6.9304	.11133	3192.5	6.9109	.10703	3190.7	6.8921	.10303
390	3218.4	6.9845	.11801	3216.7	6.9644	.11330	3215.0	6.9451	.10893	3213.3	6.9264	.10488
400	3240.7	7.0178	.12004	3239.0	6.9979	.11526	3237.4	6.9787	.11083	3235.8	6.9601	.10671
410	3262.9	7.0505	.12206	3261.3	7.0307	.11721	3259.8	7.0116	.11271	3258.2	6.9931	.10854
420	3285.0	7.0827	.12407	3283.5	7.0630	.11914	3282.0	7.0440	.11458	3280.5	7.0256	.11035
430	3307.1	7.1143	.12607	3305.7	7.0947	.12107	3304.3	7.0758	.11645	3302.8	7.0575	.11215
440	3329.2	7.1455	.12806	3327.8	7.1260	.12299	3326.5	7.1072	.11830	3325.1	7.0890	.11395
450	3351.3	7.1763	.13004	3349.9	7.1568	.12491	3348.6	7.1381	.12015	3347.3	7.1199	.11574
460	3373.3	7.2066	.13202	3372.1	7.1872	.12681	3370.8	7.1685	.12199	3369.5	7.1504	.11752
470	3395.4	7.2365	.13399	3394.2	7.2172	.12871	3393.0	7.1985	.12383	3391.7	7.1805	.11929
480	3417.5	7.2660	.13596	3416.3	7.2467	.13061	3415.1	7.2282	.12566	3413.9	7.2102	.12106
490	3439.6	7.2952	.13792	3438.5	7.2760	.13250	3437.3	7.2574	.12748	3436.2	7.2395	.12282
500	3461.7	7.3240	.13987	3460.6	7.3048	.13438	3459.5	7.2863	.12930	3458.4	7.2685	.12458
510	3483.9	7.3525	.14182	3482.8	7.3333	.13626	3481.8	7.3149	.13111	3480.7	7.2971	.12633
520	3506.1	7.3806	.14377	3505.1	7.3615	.13814	3504.0	7.3431	.13292	3503.0	7.3254	.12808
530	3528.3	7.4085	.14571	3527.3	7.3894	.14001	3526.3	7.3711	.13473	3525.3	7.3533	.12982
540	3550.6	7.4360	.14765	3549.6	7.4170	.14187	3548.6	7.3987	.13653	3547.6	7.3810	.13156
550	3572.9	7.4633	.14958	3571.9	7.4443	.14374	3571.0	7.4260	.13833	3570.0	7.4084	.13330
560	3595.2	7.4903	.15151	3594.3	7.4713	.14560	3593.4	7.4531	.14012	3592.5	7.4355	.13503
570	3617.6	7.5170	.15344	3616.7	7.4981	.14745	3615.8	7.4799	.14191	3614.9	7.4623	.13676
580	3640.1	7.5434	.15537	3639.2	7.5246	.14931	3638.3	7.5064	.14370	3637.5	7.4888	.13849
590	3662.6	7.5697	.15729	3661.7	7.5508	.15116	3660.9	7.5326	.14548	3660.0	7.5151	.14022
600	3685.1	7.5956	.15921	3684.3	7.5768	.15301	3663.5	7.5587	.14727	3682.6	7.5412	.14194

TABLE 3 WATER AND STEAM

p(MPa)	= 2.500			2.600			2.700			= 2.800		
SAT t(°C)	223.94			226.04			228.07			230.05		
SAT.LIQ	962.0	2.5543	.0011972	971.7	2.5736	.0012011	981.2	2.5924	.0012050	990.5	2.6106	.0012088
SAT.VAP	2800.9	6.2536	.07991	2801.4	6.2387	.07686	2801.7	6.2244	.07402	2802.0	6.2104	.07139
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3707.7	7.6213	.16112	3706.9	7.6025	.15485	3706.1	7.5844	.14905	3705.3	7.5670	.14365
620	3730.3	7.6468	.16304	3729.6	7.6281	.15669	3728.8	7.6100	.15082	3728.0	7.5925	.14537
630	3753.0	7.6721	.16495	3752.3	7.6534	.15853	3751.5	7.6353	.15260	3750.8	7.6179	.14708
640	3775.8	7.6971	.16686	3775.0	7.6784	.16037	3774.3	7.6604	.15437	3773.6	7.6430	.14879
650	3798.6	7.7220	.16876	3797.9	7.7033	.16221	3797.1	7.6853	.15614	3796.4	7.6679	.15050
660	3821.4	7.7466	.17067	3820.7	7.7279	.16404	3820.0	7.7099	.15791	3819.3	7.6926	.15221
670	3844.3	7.7710	.17257	3843.6	7.7524	.16587	3843.0	7.7344	.15967	3842.3	7.7170	.15391
680	3867.3	7.7952	.17447	3866.6	7.7766	.16770	3866.0	7.7586	.16144	3865.3	7.7413	.15562
690	3890.3	7.8192	.17637	3889.7	7.8006	.16953	3889.0	7.7827	.16320	3888.4	7.7654	.15732
700	3913.4	7.8431	.17826	3912.7	7.8245	.17135	3912.1	7.8066	.16496	3911.5	7.7893	.15902
710	3936.5	7.8667	.18016	3935.9	7.8481	.17318	3935.3	7.8302	.16671	3934.7	7.8130	.16071
720	3959.7	7.8902	.18205	3959.1	7.8716	.17500	3958.5	7.8537	.16847	3957.9	7.8365	.16241
730	3982.9	7.9134	.18394	3982.3	7.8949	.17682	3981.8	7.8770	.17022	3981.2	7.8598	.16410
740	4006.2	7.9365	.18583	4005.6	7.9180	.17864	4005.1	7.9002	.17198	4004.5	7.8829	.16579
750	4029.5	7.9595	.18772	4029.0	7.9409	.18046	4028.4	7.9231	.17373	4027.9	7.9059	.16748
760	4052.9	7.9822	.18961	4052.4	7.9637	.18227	4051.9	7.9459	.17548	4051.4	7.9287	.16917
770	4076.4	8.0048	.19149	4075.9	7.9863	.18409	4075.4	7.9685	.17723	4074.8	7.9513	.17086
780	4099.9	8.0272	.19338	4099.4	8.0088	.18590	4098.9	7.9910	.17897	4098.4	7.9738	.17255
790	4123.4	8.0495	.19526	4122.9	8.0310	.18771	4122.5	8.0133	.18072	4122.0	7.9961	.17423
800	4147.0	8.0716	.19714	4146.6	8.0531	.18952	4146.1	8.0354	.18247	4145.6	8.0183	.17591

TABLE 3 WATER AND STEAM

p(MPa) =	2.900			3.000			3.100			3.200		
SAT t(°C)	231.97			233.84			235.67			237.45		
SAT.LIQ	999.5	2.6263	.0012126	1008.4	2.6455	.0012163	1017.0	2.6623	.0012200	1025.4	2.6786	.0012237
SAT.VAP	2802.2	6.1969	.06893	2802.3	6.1837	.06663	2802.3	6.1709	.06447	2802.3	6.1585	.06244
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	2.9	.0001	.0009988	3.0	.0001	.0009987	3.1	.0001	.0009987	3.2	.0001	.0009986
10	44.8	.1507	.0009989	44.9	.1507	.0009988	45.0	.1507	.0009988	45.1	.1507	.0009987
20	86.6	.2957	.0010004	86.7	.2957	.0010004	86.8	.2957	.0010003	86.9	.2956	.0010003
30	128.3	.4356	.0010030	128.4	.4356	.0010030	128.5	.4356	.0010029	128.6	.4355	.0010029
40	170.0	.5710	.0010065	170.1	.5709	.0010065	170.2	.5709	.0010064	170.3	.5709	.0010064
50	211.7	.7022	.0010108	211.8	.7021	.0010108	211.9	.7021	.0010107	212.0	.7020	.0010107
60	253.5	.8294	.0010158	253.6	.8294	.0010158	253.7	.8293	.0010157	253.8	.8293	.0010157
70	295.3	.9531	.0010215	295.4	.9530	.0010215	295.5	.9530	.0010214	295.6	.9529	.0010214
80	337.2	1.0734	.0010278	337.3	1.0733	.0010278	337.3	1.0732	.0010277	337.4	1.0732	.0010277
90	379.1	1.1905	.0010347	379.2	1.1904	.0010347	379.3	1.1903	.0010346	379.4	1.1903	.0010346
100	421.2	1.3047	.0010422	421.2	1.3046	.0010422	421.3	1.3045	.0010421	421.4	1.3044	.0010421
110	463.3	1.4162	.0010504	463.4	1.4161	.0010503	463.5	1.4160	.0010502	463.5	1.4159	.0010502
120	505.6	1.5251	.0010591	505.7	1.5251	.0010590	505.8	1.5250	.0010590	505.8	1.5249	.0010589
130	548.1	1.6318	.0010684	548.2	1.6317	.0010684	548.2	1.6316	.0010683	548.3	1.6315	.0010682
140	590.8	1.7364	.0010784	590.8	1.7362	.0010783	590.9	1.7361	.0010783	591.0	1.7360	.0010782
150	633.7	1.8389	.0010891	633.7	1.8388	.0010890	633.8	1.8387	.0010890	633.8	1.8386	.0010889
160	676.8	1.9398	.0011005	676.9	1.9396	.0011005	676.9	1.9395	.0011004	677.0	1.9394	.0011003
170	720.3	2.0390	.0011128	720.3	2.0388	.0011127	720.4	2.0387	.0011126	720.4	2.0386	.0011125
180	764.1	2.1367	.0011259	764.1	2.1366	.0011258	764.2	2.1364	.0011257	764.2	2.1363	.0011256
190	808.3	2.2332	.0011400	808.3	2.2330	.0011399	808.4	2.2329	.0011398	808.4	2.2327	.0011397
200	852.9	2.3285	.0011551	853.0	2.3284	.0011550	853.0	2.3282	.0011549	853.0	2.3281	.0011548
210	898.1	2.4230	.0011715	898.1	2.4228	.0011714	898.1	2.4226	.0011712	898.2	2.4225	.0011711
220	943.8	2.5167	.0011892	943.9	2.5165	.0011891	943.9	2.5163	.0011890	943.9	2.5162	.0011888
230	990.3	2.6100	.0012086	990.3	2.6098	.0012084	990.3	2.6096	.0012083	990.3	2.6094	.0012081
240	2828.6	6.2488	.070969	2822.9	6.2241	.068162	2817.1	6.1997	.065530	2811.2	6.1757	.063055
250	2859.9	6.3092	.073395	2854.8	6.2857	.070551	2849.6	6.2626	.067885	2844.4	6.2398	.065380
260	2889.7	6.3657	.075714	2885.1	6.3432	.072829	2880.5	6.3211	.070125	2875.8	6.2993	.067587
270	2918.3	6.4187	.077943	2914.1	6.3970	.075015	2910.0	6.3758	.072272	2905.7	6.3549	.069697
280	2945.8	6.4689	.080098	2942.0	6.4479	.077124	2938.2	6.4274	.074340	2934.4	6.4072	.071727
290	2972.4	6.5166	.082189	2968.9	6.4962	.079169	2965.5	6.4762	.076342	2962.0	6.4567	.073689
300	2998.2	6.5621	.084226	2995.1	6.5422	.081159	2991.9	6.5227	.078287	2988.7	6.5037	.075593

TABLE 3 WATER AND STEAM

p(MPa)	2.900			3.000			3.100			3.200		
SAT t(°C)	231.97			233.84			235.67			237.45		
SAT.LIQ	999.5	2.6283	.0012126	1008.4	2.6455	.0012163	1017.0	2.6623	.0012200	1025.4	2.6786	.0012237
SAT.VAP	2802.2	6.1969	.06893	2802.3	6.1837	.06663	2802.3	6.1709	.06447	2802.3	6.1585	.06244
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3023.4	6.6057	.086218	3020.5	6.5862	.083102	3017.6	6.5672	.080185	3014.7	6.5487	.077449
320	3048.1	6.6476	.088170	3045.4	6.6285	.085005	3042.7	6.6099	.082043	3040.0	6.5917	.079264
330	3072.3	6.6881	.090089	3069.9	6.6694	.086874	3067.4	6.6511	.083865	3064.8	6.6332	.081043
340	3096.2	6.7273	.091978	3093.9	6.7088	.088713	3091.5	6.6908	.085657	3089.2	6.6733	.082791
350	3119.7	6.7654	.093843	3117.5	6.7471	.090526	3115.4	6.7294	.087423	3113.2	6.7120	.084513
360	3143.0	6.8024	.095685	3140.9	6.7844	.092318	3138.9	6.7668	.089167	3136.8	6.7497	.086212
370	3166.0	6.8385	.097508	3164.1	6.8207	.094089	3162.1	6.8033	.090890	3160.2	6.7863	.087890
380	3188.9	6.8738	.099315	3187.0	6.8561	.095844	3185.2	6.8388	.092597	3183.4	6.8221	.089552
390	3211.6	6.9083	.10111	3209.8	6.8907	.097584	3208.1	6.8736	.094288	3206.4	6.8570	.091197
400	3234.1	6.9421	.10288	3232.5	6.9246	.099310	3230.8	6.9077	.095965	3229.2	6.8912	.092829
410	3256.6	6.9753	.10465	3255.1	6.9579	.10102	3253.5	6.9411	.097631	3251.9	6.9247	.094449
420	3279.0	7.0078	.10641	3277.5	6.9906	.10273	3276.0	6.9738	.099286	3274.5	6.9576	.096058
430	3301.4	7.0398	.10815	3299.9	7.0227	.10442	3298.5	7.0060	.10093	3297.1	6.9898	.097657
440	3323.7	7.0713	.10989	3322.3	7.0543	.10611	3320.9	7.0377	.10257	3319.5	7.0216	.099248
450	3346.0	7.1024	.11162	3344.6	7.0854	.10779	3343.3	7.0689	.10420	3342.0	7.0528	.10083
460	3368.2	7.1329	.11335	3367.0	7.1160	.10946	3365.7	7.0996	.10582	3364.4	7.0836	.10241
470	3390.5	7.1631	.11507	3389.3	7.1462	.11112	3388.0	7.1298	.10743	3386.8	7.1140	.10397
480	3412.8	7.1928	.11678	3411.6	7.1760	.11278	3410.4	7.1597	.10904	3409.2	7.1439	.10554
490	3435.0	7.2222	.11848	3433.9	7.2054	.11443	3432.7	7.1892	.11065	3431.6	7.1734	.10709
500	3457.3	7.2512	.12018	3456.2	7.2345	.11608	3455.1	7.2183	.11224	3454.0	7.2026	.10865
510	3479.6	7.2799	.12188	3478.5	7.2632	.11772	3477.4	7.2470	.11384	3476.4	7.2314	.11019
520	3501.9	7.3082	.12357	3500.9	7.2916	.11936	3499.8	7.2755	.11543	3498.8	7.2598	.11174
530	3524.3	7.3362	.12526	3523.3	7.3196	.12100	3522.3	7.3035	.11701	3521.2	7.2879	.11328
540	3546.7	7.3639	.12694	3545.7	7.3474	.12263	3544.7	7.3313	.11859	3543.7	7.3158	.11481
550	3569.1	7.3913	.12862	3568.1	7.3748	.12426	3567.2	7.3588	.12017	3566.2	7.3433	.11634
560	3591.5	7.4184	.13030	3590.6	7.4020	.12588	3589.7	7.3860	.12174	3588.8	7.3705	.11787
570	3614.0	7.4453	.13197	3613.2	7.4288	.12750	3612.3	7.4129	.12332	3611.4	7.3974	.11939
580	3636.6	7.4719	.13364	3635.7	7.4554	.12912	3634.8	7.4395	.12488	3634.0	7.4241	.12091
590	3659.2	7.4982	.13531	3658.3	7.4818	.13073	3657.5	7.4659	.12645	3656.6	7.4505	.12243
600	3681.8	7.5243	.13697	3681.0	7.5079	.13234	3680.2	7.4920	.12801	3679.3	7.4767	.12395

TABLE 3 WATER AND STEAM

p(MPa) =	2.900			3.000			3.100			3.200		
SAT t(°C)	231.97			233.84			235.67			237.45		
SAT.LIQ	999.5	2.6283	.0012126	1008.4	2.6455	.0012163	1017.0	2.6623	.0012200	1025.4	2.6786	.0012237
SAT.VAP	2802.2	6.1969	.06893	2802.3	6.1837	.06663	2802.3	6.1709	.06447	2802.3	6.1585	.06244
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3704.5	7.5501	.13864	3703.7	7.5338	.13395	3702.9	7.5179	.12957	3702.1	7.5026	.12546
620	3727.2	7.5757	.14029	3726.5	7.5594	.13556	3725.7	7.5436	.13112	3724.9	7.5283	.12697
630	3750.0	7.6010	.14195	3749.3	7.5848	.13716	3748.5	7.5690	.13268	3747.7	7.5537	.12848
640	3772.8	7.6262	.14360	3772.1	7.6099	.13876	3771.4	7.5942	.13423	3770.6	7.5789	.12998
650	3795.7	7.6511	.14526	3795.0	7.6349	.14036	3794.3	7.6191	.13578	3793.6	7.6039	.13148
660	3818.6	7.6758	.14691	3818.0	7.6596	.14196	3817.3	7.6439	.13733	3816.6	7.6287	.13299
670	3841.6	7.7003	.14855	3841.0	7.6841	.14355	3840.3	7.6684	.13887	3839.6	7.6532	.13448
680	3864.7	7.7246	.15020	3864.0	7.7084	.14514	3863.3	7.6928	.14041	3862.7	7.6776	.13598
690	3887.7	7.7487	.15184	3887.1	7.7325	.14673	3886.5	7.7169	.14196	3885.8	7.7017	.13747
700	3910.9	7.7726	.15349	3910.3	7.7564	.14832	3909.6	7.7408	.14349	3909.0	7.7257	.13897
710	3934.1	7.7963	.15513	3933.5	7.7802	.14991	3932.9	7.7646	.14503	3932.3	7.7494	.14046
720	3957.3	7.8198	.15676	3956.7	7.8037	.15150	3956.1	7.7881	.14657	3955.6	7.7730	.14195
730	3980.6	7.8432	.15840	3980.0	7.8271	.15308	3979.5	7.8115	.14810	3978.9	7.7964	.14343
740	4004.0	7.8663	.16004	4003.4	7.8502	.15466	4002.9	7.8347	.14963	4002.3	7.8196	.14492
750	4027.4	7.8893	.16167	4026.8	7.8733	.15624	4026.3	7.8577	.15116	4025.8	7.8426	.14640
760	4050.8	7.9121	.16330	4050.3	7.8961	.15782	4049.8	7.8805	.15269	4049.3	7.8655	.14789
770	4074.3	7.9348	.16493	4073.8	7.9187	.15940	4073.3	7.9032	.15422	4072.8	7.8882	.14937
780	4097.9	7.9572	.16656	4097.4	7.9412	.16097	4096.9	7.9257	.15575	4096.4	7.9107	.15085
790	4121.5	7.9796	.16819	4121.0	7.9636	.16255	4120.5	7.9481	.15727	4120.1	7.9331	.15233
800	4145.2	8.0017	.16982	4144.7	7.9857	.16412	4144.2	7.9702	.15880	4143.8	7.9552	.15381

TABLE 3 WATER AND STEAM

p(MPa) =	3.300			3.400			3.500			= 3.600		
SAT t(°C)	239.18			240.68			242.54			244.16		
SAT.LIQ	1033.7	2.6945	.0012274	1041.8	2.7101	.0012310	1049.8	2.7253	.0012345	1057.6	2.7401	.0012381
SAT.VAP	2802.3	6.1463	.06053	2802.1	6.1344	.05873	2802.0	6.1228	.05703	2801.7	6.1115	.05541
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	3.3	.0001	.0009986	3.4	.0001	.0009985	3.5	.0001	.0009985	3.6	.0001	.0009984
10	45.2	.1507	.0009987	45.3	.1507	.0009987	45.4	.1507	.0009986	45.5	.1507	.0009986
20	87.0	.2956	.0010002	87.1	.2956	.0010002	87.1	.2956	.0010001	87.2	.2955	.0010001
30	128.7	.4355	.0010028	126.8	.4355	.0010028	128.8	.4354	.0010028	128.9	.4354	.0010027
40	170.4	.5708	.0010063	170.5	.5708	.0010063	170.5	.5708	.0010063	170.6	.5707	.0010062
50	212.1	.7020	.0010106	212.2	.7019	.0010106	212.3	.7019	.0010106	212.3	.7018	.0010105
60	253.8	.8292	.0010157	253.9	.8292	.0010156	254.0	.8291	.0010156	254.1	.8291	.0010155
70	295.6	.9529	.0010213	295.7	.9528	.0010213	295.8	.9527	.0010212	295.9	.9527	.0010212
80	337.5	1.0731	.0010276	337.6	1.0730	.0010276	337.7	1.0730	.0010275	337.7	1.0729	.0010275
90	379.4	1.1902	.0010345	379.5	1.1901	.0010345	379.6	1.1900	.0010344	379.7	1.1900	.0010344
100	421.5	1.3044	.0010420	421.5	1.3043	.0010420	421.6	1.3042	.0010419	421.7	1.3041	.0010419
110	463.6	1.4158	.0010501	463.7	1.4157	.0010501	463.8	1.4157	.0010500	463.8	1.4156	.0010500
120	505.9	1.5248	.0010588	506.0	1.5247	.0010588	506.0	1.5246	.0010587	506.1	1.5245	.0010587
130	548.4	1.6314	.0010682	548.4	1.6313	.0010681	548.5	1.6312	.0010681	548.6	1.6311	.0010680
140	591.0	1.7359	.0010782	591.1	1.7358	.0010781	591.1	1.7357	.0010780	591.2	1.7356	.0010780
150	633.9	1.8385	.0010888	634.0	1.8384	.0010888	634.0	1.8383	.0010887	634.1	1.8382	.0010886
160	677.0	1.9393	.0011002	677.1	1.9392	.0011002	677.2	1.9390	.0011001	677.2	1.9389	.0011000
170	720.5	2.0384	.0011125	720.6	2.0383	.0011124	720.6	2.0382	.0011123	720.7	2.0381	.0011122
180	764.3	2.1362	.0011255	764.3	2.1360	.0011254	764.4	2.1359	.0011254	764.4	2.1358	.0011253
190	808.5	2.2326	.0011396	808.5	2.2324	.0011395	808.6	2.2323	.0011394	808.6	2.2322	.0011393
200	853.1	2.3279	.0011547	853.1	2.3277	.0011546	853.2	2.3276	.0011545	853.2	2.3274	.0011544
210	898.2	2.4223	.0011710	898.3	2.4221	.0011709	898.3	2.4220	.0011708	898.3	2.4218	.0011707
220	943.9	2.5160	.0011887	944.0	2.5158	.0011886	944.0	2.5156	.0011885	944.0	2.5154	.0011883
230	990.4	2.6092	.0012080	990.4	2.6090	.0012079	990.4	2.6088	.0012077	990.4	2.6085	.0012076
240	2805.1	6.1519	.060723	1037.6	2.7019	.0012290	1037.6	2.7017	.0012288	1037.6	2.7014	.0012287
250	2839.0	6.2173	.063021	2833.6	6.1951	.060796	2828.1	6.1732	.058693	2822.5	6.1514	.056702
260	2871.0	6.2779	.065198	2866.2	6.2568	.062945	2861.3	6.2360	.060818	2856.3	6.2155	.058804
270	2901.4	6.3344	.067275	2897.1	6.3143	.064992	2892.7	6.2944	.062836	2888.2	6.2748	.060797
280	2930.5	6.3875	.069269	2926.6	6.3681	.066954	2922.6	6.3490	.064768	2918.6	6.3302	.062700
290	2958.5	6.4376	.071194	2954.9	6.4188	.068844	2951.3	6.4004	.066626	2947.7	6.3823	.064530
300	2985.5	6.4851	.073061	2982.2	6.4669	.070675	2979.0	6.4491	.068424	2975.6	6.4315	.066297

TABLE 3 WATER AND STEAM

p(MPa)	= 3.300			= 3.400			3.500			= 3.600		
SAT t(°C)	239.18			240.88			242.54			244.16		
SAT.LIQ	1033.7	2.6945	.0012274	1041.8	2.7101	.0012310	1049.8	2.7253	.0012345	1057.6	2.7401	.0012381
SAT.VAP	2802.3	6.1463	.06053	2802.1	6.1344	.05873	2802.0	6.1228	.05703	2801.7	6.1115	.05541
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	3011.7	6.5305	.074878	3008.7	6.5128	.072456	3005.7	6.4954	.070171	3002.7	6.4783	.068011
320	3037.3	6.5740	.076652	3034.5	6.5566	.074193	3031.8	6.5396	.071873	3028.9	6.5230	.069681
330	3062.3	6.6158	.078391	3059.7	6.5988	.075894	3057.2	6.5821	.073538	3054.6	6.5658	.071312
340	3086.8	6.6561	.080098	3084.4	6.6394	.077563	3082.0	6.6230	.075171	3079.6	6.6070	.072911
350	3110.9	6.6952	.081778	3108.7	6.6787	.079204	3106.5	6.6626	.076776	3104.2	6.6468	.074482
360	3134.7	6.7330	.083435	3132.7	6.7168	.080822	3130.6	6.7009	.078357	3128.4	6.6854	.076028
370	3158.2	6.7699	.085072	3156.3	6.7538	.082419	3154.3	6.7381	.079916	3152.3	6.7228	.077553
380	3181.5	6.8058	.086691	3179.7	6.7899	.083998	3177.8	6.7744	.081458	3175.9	6.7592	.079059
390	3204.6	6.8408	.088294	3202.8	6.8251	.085561	3201.1	6.8097	.082983	3199.3	6.7947	.080549
400	3227.5	6.8752	.089883	3225.9	6.8595	.087110	3224.2	6.8443	.084494	3222.5	6.8294	.082024
410	3250.3	6.9088	.091460	3248.7	6.8933	.088646	3247.1	6.8781	.085993	3245.5	6.8634	.083487
420	3273.0	6.9417	.093026	3271.5	6.9263	.090172	3270.0	6.9113	.087480	3268.4	6.8967	.084938
430	3295.6	6.9741	.094582	3294.2	6.9588	.091687	3292.7	6.9439	.088958	3291.2	6.9293	.086379
440	3318.2	7.0060	.096129	3316.8	6.9907	.093194	3315.4	6.9759	.090426	3314.0	6.9614	.087812
450	3340.6	7.0373	.097668	3339.3	7.0221	.094692	3338.0	7.0074	.091886	3336.6	6.9930	.089236
460	3363.1	7.0681	.099200	3361.8	7.0530	.096183	3360.5	7.0384	.093339	3359.2	7.0241	.090652
470	3385.6	7.0985	.10073	3384.3	7.0835	.097668	3383.1	7.0689	.094785	3381.8	7.0546	.092062
480	3408.0	7.1285	.10225	3406.8	7.1135	.099146	3405.6	7.0990	.096225	3404.4	7.0848	.093465
490	3430.4	7.1581	.10376	3429.2	7.1432	.10062	3428.1	7.1287	.097659	3426.9	7.1145	.094863
500	3452.8	7.1873	.10527	3451.7	7.1724	.10209	3450.6	7.1580	.099088	3449.5	7.1439	.096255
510	3475.3	7.2161	.10677	3474.2	7.2013	.10355	3473.1	7.1869	.10051	3472.0	7.1729	.097643
520	3497.7	7.2446	.10827	3496.7	7.2299	.10501	3495.6	7.2155	.10193	3494.6	7.2015	.099026
530	3520.2	7.2728	.10977	3519.2	7.2581	.10646	3518.2	7.2438	.10335	3517.2	7.2298	.10040
540	3542.7	7.3007	.11126	3541.8	7.2860	.10791	3540.8	7.2717	.10476	3539.8	7.2578	.10178
550	3565.3	7.3282	.11274	3564.3	7.3136	.10936	3563.4	7.2993	.10617	3562.4	7.2854	.10315
560	3587.8	7.3555	.11423	3586.9	7.3408	.11080	3586.0	7.3266	.10757	3585.1	7.3128	.10452
570	3610.5	7.3824	.11571	3609.6	7.3679	.11224	3608.7	7.3537	.10897	3607.8	7.3399	.10588
580	3633.1	7.4091	.11719	3632.2	7.3946	.11368	3631.4	7.3804	.11037	3630.5	7.3667	.10724
590	3655.8	7.4356	.11866	3654.9	7.4211	.11511	3654.1	7.4069	.11176	3653.3	7.3932	.10860
600	3678.5	7.4618	.12013	3677.7	7.4473	.11654	3676.9	7.4332	.11315	3676.1	7.4195	.10996

TABLE 3 WATER AND STEAM

p(MPa) =	3.300			3.400			3.500			3.600		
SAT t(°C)	239.18			240.88			242.54			244.16		
SAT.LIQ	1033.7	2.6945	.0012274	1041.8	2.7101	.0012310	1049.8	2.7253	.0012345	1057.6	2.7401	.0012381
SAT.VAP	2802.3	6.1463	.06053	2802.1	6.1344	.05873	2802.0	6.1228	.05703	2801.7	6.1115	.05541
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3701.3	7.4877	.12160	3700.5	7.4732	.11797	3699.7	7.4592	.11454	3698.9	7.4455	.11131
620	3724.1	7.5134	.12307	3723.3	7.4989	.11939	3722.6	7.4849	.11593	3721.8	7.4712	.11266
630	3747.0	7.5388	.12453	3746.2	7.5244	.12082	3745.5	7.5104	.11731	3744.7	7.4968	.11401
640	3769.9	7.5641	.12599	3769.2	7.5497	.12224	3768.4	7.5357	.11869	3767.7	7.5221	.11535
650	3792.9	7.5891	.12745	3792.1	7.5747	.12365	3791.4	7.5607	.12007	3790.7	7.5471	.11669
660	3815.9	7.6139	.12891	3815.2	7.5995	.12507	3814.5	7.5856	.12145	3813.8	7.5720	.11803
670	3838.9	7.6385	.13036	3838.3	7.6241	.12648	3837.6	7.6102	.12283	3836.9	7.5966	.11937
680	3862.0	7.6628	.13181	3861.4	7.6485	.12789	3860.7	7.6346	.12420	3860.1	7.6211	.12071
690	3885.2	7.6870	.13327	3884.6	7.6727	.12930	3883.9	7.6588	.12557	3883.3	7.6453	.12204
700	3908.4	7.7110	.13471	3907.8	7.6967	.13071	3907.2	7.6828	.12694	3906.5	7.6693	.12337
710	3931.7	7.7348	.13616	3931.1	7.7205	.13212	3930.5	7.7066	.12831	3929.9	7.6932	.12470
720	3955.0	7.7583	.13761	3954.4	7.7441	.13352	3953.8	7.7303	.12967	3953.2	7.7168	.12603
730	3978.3	7.7818	.13905	3977.8	7.7675	.13492	3977.2	7.7537	.13103	3976.6	7.7403	.12736
740	4001.8	7.8050	.14049	4001.2	7.7908	.13633	4000.6	7.7770	.13240	4000.1	7.7635	.12869
750	4025.2	7.8280	.14193	4024.7	7.8138	.13773	4024.1	7.8000	.13376	4023.6	7.7866	.13001
760	4048.7	7.8509	.14337	4048.2	7.8367	.13912	4047.7	7.8229	.13512	4047.2	7.8095	.13133
770	4072.3	7.8736	.14481	4071.8	7.8594	.14052	4071.3	7.8457	.13647	4070.8	7.8323	.13265
780	4095.9	7.8961	.14625	4095.4	7.8820	.14192	4094.9	7.8682	.13783	4094.4	7.8549	.13397
790	4119.6	7.9185	.14768	4119.1	7.9044	.14331	4118.6	7.8906	.13919	4118.1	7.8773	.13529
800	4143.3	7.9407	.14912	4142.8	7.9266	.14470	4142.4	7.9128	.14054	4141.9	7.8995	.13661

TABLE 3 WATER AND STEAM

p(MPa) =	3.700			3.800			3.900			4.000		
SAT t(°C)	245.75			247.31			248.84			250.33		
SAT.LIQ	1065.2	2.7547	.0012416	1072.7	2.7689	.0012451	1080.1	2.7829	.0012486	1087.4	2.7965	.0012521
SAT.VAP	2801.4	6.1004	.05389	2801.1	6.0896	.05244	2800.8	6.0789	.05106	2800.3	6.0685	.04975
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	3.7	.0001	.0009984	3.8	.0001	.0009983	3.9	.0002	.0009983	4.0	.0002	.0009982
10	45.6	.1507	.0009985	45.7	.1507	.0009985	45.8	.1507	.0009984	45.9	.1506	.0009984
20	87.3	.2955	.0010000	87.4	.2955	.0010000	87.5	.2955	.0010000	87.6	.2955	.0009999
30	129.0	.4354	.0010027	129.1	.4353	.0010026	129.2	.4353	.0010026	129.3	.4353	.0010025
40	170.7	.5707	.0010062	170.8	.5706	.0010061	170.9	.5706	.0010061	171.0	.5706	.0010060
50	212.4	.7018	.0010105	212.5	.7017	.0010104	212.6	.7017	.0010104	212.7	.7017	.0010103
60	254.2	.8290	.0010155	254.3	.8290	.0010154	254.3	.8289	.0010154	254.4	.8289	.0010153
70	296.0	.9526	.0010211	296.0	.9526	.0010211	296.1	.9525	.0010210	296.2	.9524	.0010210
80	337.8	1.0728	.0010274	337.9	1.0728	.0010274	338.0	1.0727	.0010273	338.1	1.0726	.0010273
90	379.7	1.1899	.0010343	379.8	1.1898	.0010343	379.9	1.1898	.0010342	380.0	1.1897	.0010342
100	421.8	1.3041	.0010418	421.8	1.3040	.0010418	421.9	1.3039	.0010417	422.0	1.3038	.0010417
110	463.9	1.4155	.0010499	464.0	1.4154	.0010499	464.0	1.4153	.0010498	464.1	1.4152	.0010498
120	506.2	1.5244	.0010586	506.3	1.5243	.0010586	506.3	1.5242	.0010585	506.4	1.5242	.0010584
130	548.6	1.6310	.0010679	548.7	1.6309	.0010679	548.8	1.6308	.0010678	548.8	1.6307	.0010677
140	591.3	1.7355	.0010779	591.3	1.7354	.0010778	591.4	1.7353	.0010778	591.5	1.7352	.0010777
150	634.1	1.8381	.0010886	634.2	1.8380	.0010885	634.3	1.8378	.0010884	634.3	1.8377	.0010883
160	677.3	1.9388	.0010999	677.3	1.9387	.0010999	677.4	1.9386	.0010998	677.5	1.9385	.0010997
170	720.7	2.0379	.0011121	720.8	2.0378	.0011121	720.8	2.0377	.0011120	720.9	2.0376	.0011119
180	764.5	2.1356	.0011252	764.5	2.1355	.0011251	764.6	2.1353	.0011250	764.6	2.1352	.0011249
190	808.6	2.2320	.0011392	808.7	2.2319	.0011391	808.7	2.2317	.0011390	808.8	2.2316	.0011389
200	853.2	2.3273	.0011543	853.3	2.3271	.0011542	853.3	2.3270	.0011541	853.4	2.3268	.0011540
210	898.4	2.4216	.0011706	898.4	2.4215	.0011704	898.4	2.4213	.0011703	898.5	2.4211	.0011702
220	944.1	2.5152	.0011882	944.1	2.5151	.0011881	944.1	2.5149	.0011880	944.1	2.5147	.0011878
230	990.4	2.6083	.0012074	990.5	2.6081	.0012073	990.5	2.6079	.0012072	990.5	2.6077	.0012070
240	1037.6	2.7012	.0012285	1037.6	2.7010	.0012284	1037.7	2.7008	.0012282	1037.7	2.7006	.0012280
250	2816.8	6.1299	.054812	2811.0	6.1085	.053017	2805.1	6.0872	.051308	1085.8	2.7934	.0012512
260	2851.3	6.1951	.056895	2846.1	6.1750	.055082	2840.9	6.1551	.053358	2835.6	6.1353	.051716
270	2883.7	6.2555	.058864	2879.1	6.2364	.057030	2874.5	6.2175	.055287	2869.8	6.1988	.053628
280	2914.5	6.3117	.060742	2910.4	6.2935	.058885	2906.3	6.2754	.057120	2902.0	6.2576	.055441
290	2944.0	6.3645	.062544	2940.3	6.3469	.060661	2936.5	6.3296	.058872	2932.7	6.3126	.057171
300	2972.3	6.4143	.064282	2968.9	6.3973	.062372	2965.5	6.3806	.060558	2962.0	6.3642	.058833

TABLE 3 WATER AND STEAM

p(MPa) =	3.700			= 3.800			= 3.900			= 4.000		
SAT t(°C)	245.75			247.31			248.84			250.33		
SAT.LIQ	1065.2	2.7547	.0012416	1072.7	2.7689	.0012451	1080.1	2.7829	.0012486	1087.4	2.7965	.0012521
SAT.VAP	2801.4	6.1004	.05389	2801.1	6.0896	.05244	2800.8	6.0789	.05106	2800.3	6.0685	.04975
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	2999.6	6.4615	.065967	2996.5	6.4451	.064029	2993.4	6.4289	.062188	2990.2	6.4130	.060439
320	3026.1	6.5066	.067606	3023.3	6.4906	.065639	3020.4	6.4748	.063771	3017.5	6.4593	.061996
330	3052.0	6.5498	.069206	3049.3	6.5341	.067209	3046.7	6.5187	.065314	3044.0	6.5036	.063513
340	3077.2	6.5913	.070773	3074.8	6.5760	.068746	3072.3	6.5609	.066823	3069.8	6.5461	.064994
350	3102.0	6.6314	.072311	3099.7	6.6163	.070254	3097.4	6.6015	.068302	3095.1	6.5870	.066446
360	3126.3	6.6702	.073825	3124.2	6.6553	.071736	3122.0	6.6408	.069755	3119.9	6.6265	.067872
370	3150.3	6.7078	.075316	3148.3	6.6931	.073197	3146.3	6.6788	.071186	3144.3	6.6647	.069275
380	3174.1	6.7444	.076789	3172.2	6.7299	.074638	3170.3	6.7157	.072597	3168.4	6.7019	.070658
390	3197.5	6.7801	.078245	3195.7	6.7657	.076063	3194.0	6.7517	.073992	3192.1	6.7380	.072024
400	3220.8	6.8149	.079687	3219.1	6.8007	.077473	3217.4	6.7868	.075372	3215.7	6.7733	.073376
410	3243.9	6.8490	.081116	3242.3	6.8349	.078870	3240.7	6.8212	.076738	3239.1	6.8077	.074713
420	3266.9	6.8824	.082533	3265.4	6.8684	.080255	3263.8	6.8548	.078093	3262.3	6.8414	.076039
430	3289.8	6.9152	.083941	3288.3	6.9013	.081630	3286.8	6.8877	.079437	3285.4	6.8745	.077355
440	3312.6	6.9473	.085339	3311.2	6.9336	.082995	3309.7	6.9201	.080772	3308.3	6.9069	.078660
450	3335.3	6.9790	.086728	3333.9	6.9653	.084353	3332.6	6.9519	.082099	3331.2	6.9388	.079958
460	3357.9	7.0101	.088110	3356.6	6.9965	.085702	3355.3	6.9832	.083418	3354.0	6.9702	.081247
470	3380.6	7.0408	.089486	3379.3	7.0272	.087045	3378.1	7.0140	.084730	3376.8	7.0010	.082530
480	3403.2	7.0710	.090855	3402.0	7.0575	.088382	3400.8	7.0443	.086035	3399.6	7.0314	.083806
490	3425.8	7.1008	.092218	3424.6	7.0873	.089712	3423.4	7.0742	.087335	3422.3	7.0614	.085076
500	3448.4	7.1302	.093576	3447.2	7.1168	.091038	3446.1	7.1037	.088629	3445.0	7.0909	.086341
510	3470.9	7.1592	.094929	3469.9	7.1459	.092358	3468.8	7.1328	.089919	3467.7	7.1201	.087601
520	3493.5	7.1879	.096277	3492.5	7.1746	.093674	3491.4	7.1616	.091203	3490.4	7.1489	.088857
530	3516.2	7.2162	.097622	3515.1	7.2030	.094985	3514.1	7.1900	.092484	3513.1	7.1774	.090108
540	3538.8	7.2442	.098962	3537.8	7.2310	.096293	3536.8	7.2181	.093760	3535.8	7.2055	.091354
550	3561.5	7.2719	.10030	3560.5	7.2587	.097596	3559.5	7.2459	.095033	3558.6	7.2333	.092598
560	3584.1	7.2993	.10163	3583.2	7.2862	.098896	3582.3	7.2733	.096302	3581.4	7.2608	.093837
570	3606.9	7.3264	.10296	3606.0	7.3133	.10019	3605.1	7.3005	.097567	3604.2	7.2880	.095073
580	3629.6	7.3532	.10429	3628.7	7.3402	.10149	3627.9	7.3274	.098830	3627.0	7.3149	.096306
590	3652.4	7.3798	.10561	3651.6	7.3667	.10278	3650.7	7.3540	.10009	3649.9	7.3416	.097536
600	3675.2	7.4061	.10693	3674.4	7.3931	.10406	3673.6	7.3804	.10135	3672.8	7.3680	.098763

TABLE 3 WATER AND STEAM

p(MPa) =	3.700			3.800			3.900			= 4.000		
SAT t(°C)	245.75			247.31			248.84			250.33		
SAT.LIQ	1065.2	2.7547	.0012416	1072.7	2.7689	.0012451	1080.1	2.7829	.0012486	1087.4	2.7965	.0012521
SAT.VAP	2801.4	6.1004	.05389	2801.1	6.0896	.05244	2800.8	6.0789	.05106	2800.3	6.0685	.04975
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3698.1	7.4321	.10825	3697.3	7.4191	.10535	3696.5	7.4065	.10260	3695.7	7.3941	.099987
620	3721.0	7.4579	.10956	3720.2	7.4450	.10663	3719.5	7.4323	.10385	3718.7	7.4200	.10121
630	3744.0	7.4835	.11088	3743.2	7.4705	.10791	3742.5	7.4579	.10510	3741.7	7.4456	.10243
640	3767.0	7.5088	.11219	3766.2	7.4959	.10919	3765.5	7.4833	.10635	3764.8	7.4710	.10364
650	3790.0	7.5339	.11349	3789.3	7.5210	.11046	3788.6	7.5084	.10759	3787.9	7.4961	.10486
660	3813.1	7.5588	.11480	3812.4	7.5459	.11174	3811.7	7.5333	.10883	3811.0	7.5211	.10607
670	3836.2	7.5834	.11610	3835.6	7.5706	.11301	3834.9	7.5580	.11007	3834.2	7.5458	.10728
680	3859.4	7.6079	.11740	3858.8	7.5951	.11428	3858.1	7.5825	.11131	3857.4	7.5703	.10849
690	3882.6	7.6321	.11870	3882.0	7.6193	.11554	3881.4	7.6068	.11254	3880.7	7.5946	.10970
700	3905.9	7.6562	.12000	3905.3	7.6434	.11681	3904.7	7.6309	.11378	3904.1	7.6187	.11090
710	3929.3	7.6800	.12130	3928.7	7.6673	.11807	3928.0	7.6548	.11501	3927.4	7.6426	.11210
720	3952.6	7.7037	.12259	3952.0	7.6909	.11933	3951.5	7.6785	.11624	3950.9	7.6663	.11330
730	3976.1	7.7272	.12389	3975.5	7.7144	.12059	3974.9	7.7020	.11747	3974.4	7.6899	.11450
740	3999.5	7.7505	.12518	3999.0	7.7377	.12185	3998.4	7.7253	.11870	3997.9	7.7132	.11570
750	4023.1	7.7736	.12647	4022.5	7.7608	.12311	4022.0	7.7484	.11992	4021.4	7.7363	.11689
760	4046.6	7.7965	.12775	4046.1	7.7838	.12436	4045.6	7.7714	.12115	4045.1	7.7593	.11809
770	4070.3	7.8193	.12904	4069.8	7.8066	.12562	4069.2	7.7942	.12237	4068.7	7.7821	.11928
780	4093.9	7.8418	.13033	4093.4	7.8292	.12687	4092.9	7.8168	.12359	4092.4	7.8047	.12047
790	4117.7	7.8643	.13161	4117.2	7.8516	.12812	4116.7	7.8392	.12481	4116.2	7.8272	.12166
800	4141.4	7.8865	.13289	4141.0	7.8739	.12937	4140.5	7.8615	.12603	4140.0	7.8495	.12285

TABLE 3 WATER AND STEAM

p(MPa) =	4.100			4.200			4.300			4.400		
SAT t(°C)	251.80			253.24			254.66			256.05		
SAT.LIQ	1094.6	2.8099	.0012555	1101.6	2.8231	.0012589	1108.5	2.8360	.0012623	1115.4	2.8487	.0012657
SAT.VAP	2799.9	6.0583	.04850	2799.4	6.0482	.04731	2798.9	6.0383	.04617	2798.3	6.0286	.04508
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	4.1	.0002	.0009982	4.2	.0002	.0009981	4.3	.0002	.0009981	4.4	.0002	.0009980
10	46.0	.1506	.0009983	46.1	.1506	.0009983	46.2	.1506	.0009982	46.3	.1506	.0009982
20	87.7	.2954	.0009999	87.8	.2954	.0009998	87.9	.2954	.0009998	88.0	.2954	.0009997
30	129.4	.4352	.0010025	129.5	.4352	.0010024	129.6	.4352	.0010024	129.7	.4352	.0010024
40	171.1	.5705	.0010060	171.2	.5705	.0010060	171.2	.5704	.0010059	171.3	.5704	.0010059
50	212.8	.7016	.0010103	212.9	.7016	.0010102	212.9	.7015	.0010102	213.0	.7015	.0010102
60	254.5	.8288	.0010153	254.6	.8287	.0010152	254.7	.8287	.0010152	254.8	.8286	.0010152
70	296.3	.9524	.0010210	296.4	.9523	.0010209	296.5	.9523	.0010209	296.5	.9522	.0010208
80	338.1	1.0726	.0010272	338.2	1.0725	.0010272	338.3	1.0724	.0010271	338.4	1.0724	.0010271
90	380.1	1.1896	.0010341	380.1	1.1895	.0010341	380.2	1.1895	.0010340	380.3	1.1894	.0010340
100	422.1	1.3037	.0010416	422.1	1.3037	.0010416	422.2	1.3036	.0010415	422.3	1.3035	.0010415
110	464.2	1.4152	.0010497	464.3	1.4151	.0010496	464.3	1.4150	.0010496	464.4	1.4149	.0010495
120	506.5	1.5241	.0010584	506.5	1.5240	.0010583	506.6	1.5239	.0010583	506.7	1.5238	.0010582
130	548.9	1.6307	.0010677	549.0	1.6306	.0010676	549.0	1.6305	.0010676	549.1	1.6304	.0010675
140	591.5	1.7351	.0010776	591.6	1.7350	.0010776	591.7	1.7349	.0010775	591.7	1.7348	.0010775
150	634.4	1.8376	.0010883	634.5	1.8375	.0010882	634.5	1.8374	.0010881	634.6	1.8373	.0010881
160	677.5	1.9383	.0010997	677.6	1.9382	.0010996	677.6	1.9381	.0010995	677.7	1.9380	.0010994
170	720.9	2.0374	.0011118	721.0	2.0373	.0011117	721.1	2.0372	.0011117	721.1	2.0371	.0011116
180	764.7	2.1351	.0011248	764.7	2.1349	.0011248	764.8	2.1348	.0011247	764.8	2.1347	.0011246
190	808.8	2.2314	.0011388	808.9	2.2313	.0011387	808.9	2.2311	.0011386	809.0	2.2310	.0011386
200	853.4	2.3267	.0011539	853.5	2.3265	.0011538	853.5	2.3263	.0011537	853.5	2.3262	.0011536
210	898.5	2.4209	.0011701	898.5	2.4208	.0011700	898.6	2.4206	.0011699	898.6	2.4204	.0011698
220	944.2	2.5145	.0011877	944.2	2.5143	.0011876	944.2	2.5141	.0011875	944.3	2.5140	.0011873
230	990.5	2.6075	.0012069	990.5	2.6073	.0012067	990.6	2.6071	.0012066	990.6	2.6069	.0012064
240	1037.7	2.7003	.0012279	1037.7	2.7001	.0012277	1037.7	2.6999	.0012275	1037.7	2.6997	.0012274
250	1085.8	2.7932	.0012511	1085.8	2.7929	.0012509	1085.8	2.7927	.0012507	1085.8	2.7925	.0012505
260	2830.3	6.1157	.050150	2824.8	6.0962	.048654	2819.2	6.0768	.047223	2813.6	6.0575	.045853
270	2865.0	6.1803	.052047	2860.2	6.1620	.050537	2855.3	6.1438	.049095	2850.3	6.1257	.047715
280	2897.8	6.2401	.053841	2893.5	6.2227	.052314	2889.1	6.2054	.050857	2884.7	6.1884	.049463
290	2928.8	6.2957	.055550	2925.0	6.2791	.054005	2921.0	6.2627	.052530	2917.1	6.2464	.051120
300	2958.5	6.3480	.057191	2955.0	6.3320	.055625	2951.4	6.3162	.054130	2947.8	6.3006	.052702

TABLE 3 WATER AND STEAM

p(MPa) =	4.100			4.200			4.300			4.400		
SAT t(°C)	251.80			253.24			254.66			256.05		
SAT.LIQ	1094.6	2.8099	.0012555	1101.6	2.8231	.0012589	1108.5	2.8360	.0012623	1115.4	2.8487	.0012657
SAT.VAP	2799.9	6.0583	.04850	2799.4	6.0482	.04731	2798.9	6.0383	.04617	2798.3	6.0286	.04508
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	2987.0	6.3973	.058773	2983.8	6.3818	.057185	2980.6	6.3666	.055670	2977.3	6.3516	.054223
320	3014.6	6.4441	.060306	3011.6	6.4291	.058696	3008.7	6.4143	.057159	3005.7	6.3998	.055692
330	3041.3	6.4888	.061798	3038.6	6.4742	.060164	3035.8	6.4598	.058606	3033.1	6.4456	.057117
340	3067.3	6.5316	.063255	3064.8	6.5173	.061597	3062.3	6.5033	.060015	3059.7	6.4894	.058505
350	3092.8	6.5727	.064680	3090.4	6.5587	.062998	3088.1	6.5450	.061393	3085.7	6.5315	.059861
360	3117.7	6.6125	.066080	3115.5	6.5987	.064373	3113.3	6.5852	.062744	3111.1	6.5719	.061190
370	3142.3	6.6509	.067456	3140.2	6.6374	.065724	3138.1	6.6241	.064072	3136.1	6.6110	.062495
380	3166.4	6.6882	.068813	3164.5	6.6749	.067056	3162.6	6.6618	.065379	3160.6	6.6489	.063779
390	3190.3	6.7246	.070152	3188.5	6.7114	.068369	3186.7	6.6984	.066669	3184.9	6.6857	.065045
400	3214.0	6.7600	.071476	3212.3	6.7469	.069667	3210.5	6.7341	.067942	3208.8	6.7216	.066295
410	3237.4	6.7945	.072787	3235.8	6.7816	.070952	3234.2	6.7690	.069202	3232.5	6.7566	.067531
420	3260.7	6.8284	.074085	3259.2	6.8156	.072224	3257.6	6.8030	.070449	3256.0	6.7907	.068755
430	3283.9	6.8615	.075373	3282.4	6.8488	.073486	3280.9	6.8364	.071686	3279.4	6.8242	.069968
440	3306.9	6.8941	.076651	3305.5	6.8815	.074738	3304.1	6.8691	.072913	3302.6	6.8570	.071171
450	3329.9	6.9260	.077921	3328.5	6.9135	.075981	3327.1	6.9012	.074131	3325.8	6.8892	.072365
460	3352.7	6.9574	.079183	3351.4	6.9450	.077216	3350.1	6.9328	.075341	3348.8	6.9209	.073551
470	3375.6	6.9884	.080437	3374.3	6.9760	.078444	3373.0	6.9639	.076544	3371.8	6.9520	.074730
480	3398.4	7.0188	.081686	3397.1	7.0065	.079666	3395.9	6.9944	.077741	3394.7	6.9826	.075902
490	3421.1	7.0488	.082928	3419.9	7.0366	.080882	3418.8	7.0246	.078931	3417.6	7.0128	.077069
500	3443.9	7.0785	.084165	3442.7	7.0662	.082092	3441.6	7.0543	.080116	3440.5	7.0426	.078229
510	3466.6	7.1077	.085397	3465.5	7.0955	.083298	3464.4	7.0836	.081296	3463.3	7.0720	.079385
520	3489.3	7.1365	.086624	3488.3	7.1244	.084498	3487.2	7.1126	.082471	3486.2	7.1010	.080536
530	3512.1	7.1650	.087847	3511.1	7.1530	.085694	3510.0	7.1411	.083642	3509.0	7.1296	.081682
540	3534.8	7.1932	.089066	3533.9	7.1812	.086887	3532.9	7.1694	.084808	3531.9	7.1579	.082825
550	3557.6	7.2210	.090281	3556.7	7.2090	.088075	3555.7	7.1973	.085971	3554.7	7.1858	.083963
560	3560.4	7.2486	.091492	3579.5	7.2366	.089259	3578.6	7.2249	.087130	3577.6	7.2135	.085098
570	3603.3	7.2758	.092700	3602.4	7.2639	.090441	3601.5	7.2522	.088286	3600.6	7.2408	.086229
580	3626.1	7.3028	.093905	3625.2	7.2909	.091619	3624.4	7.2792	.089439	3623.5	7.2678	.087358
590	3649.0	7.3294	.095107	3648.2	7.3176	.092794	3647.3	7.3060	.090588	3646.5	7.2946	.088483
600	36[illegible]	7.3558	.096306	3671.1	7.3440	.093966	3670.3	7.3324	.091735	3669.5	7.3211	.089605

TABLE 3 WATER AND STEAM

p(MPa) =	4.100			4.200			4.300			4.400		
SAT t(°C)	251.88			253.24			254.66			256.05		
SAT.LIQ	1094.6	2.8099	.0012555	1101.6	2.8231	.0012589	1108.5	2.8360	.0012623	1115.4	2.8487	.0012657
SAT.VAP	2799.9	6.0583	.04850	2799.4	6.0482	.04731	2798.9	6.0383	.04617	2798.3	6.0286	.04508
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3694.9	7.3820	.097502	3694.1	7.3702	.095135	3693.3	7.3586	.092878	3692.5	7.3473	.090724
620	3717.9	7.4079	.098695	3717.1	7.3961	.096302	3716.3	7.3846	.094020	3715.6	7.3733	.091841
630	3740.9	7.4335	.099886	3740.2	7.4218	.097466	3739.4	7.4103	.095158	3738.7	7.3990	.092955
640	3764.0	7.4590	.10107	3763.3	7.4472	.098628	3762.5	7.4358	.096295	3761.8	7.4245	.094067
650	3787.1	7.4842	.10226	3786.4	7.4724	.099787	3785.7	7.4610	.097428	3785.0	7.4498	.095177
660	3810.3	7.5091	.10345	3809.6	7.4974	.10094	3808.9	7.4860	.098560	3808.2	7.4748	.096284
670	3833.5	7.5339	.10463	3832.9	7.5222	.10210	3832.2	7.5108	.099690	3831.5	7.4996	.097389
680	3856.8	7.5584	.10581	3856.1	7.5467	.10325	3855.5	7.5353	.10082	3854.8	7.5242	.098493
690	3880.1	7.5827	.10699	3879.5	7.5711	.10440	3878.8	7.5597	.10194	3878.2	7.5486	.099594
700	3903.4	7.6068	.10816	3902.8	7.5952	.10555	3902.2	7.5839	.10307	3901.6	7.5728	.10069
710	3926.8	7.6308	.10934	3926.2	7.6192	.10670	3925.6	7.6078	.10419	3925.0	7.5967	.10179
720	3950.3	7.6545	.11051	3949.7	7.6429	.10785	3949.1	7.6316	.10531	3948.5	7.6205	.10289
730	3973.8	7.6780	.11168	3973.2	7.6665	.10899	3972.6	7.6551	.10643	3972.1	7.6441	.10398
740	3997.3	7.7014	.11285	3996.8	7.6898	.11013	3996.2	7.6785	.10754	3995.7	7.6675	.10507
750	4020.9	7.7245	.11402	4020.4	7.7130	.11127	4019.8	7.7017	.10866	4019.3	7.6907	.10616
760	4044.5	7.7475	.11518	4044.0	7.7360	.11241	4043.5	7.7247	.10977	4043.0	7.7137	.10725
770	4068.2	7.7703	.11635	4067.7	7.7588	.11355	4067.2	7.7476	.11089	4066.7	7.7366	.10834
780	4092.0	7.7930	.11751	4091.5	7.7815	.11469	4091.0	7.7703	.11200	4090.5	7.7593	.10943
790	4115.7	7.8154	.11867	4115.3	7.8040	.11582	4114.8	7.7927	.11311	4114.3	7.7818	.11051
800	4139.6	7.8378	.11983	4139.1	7.8263	.11696	4138.6	7.8151	.11422	4138.2	7.8041	.11160

TABLE 3 WATER AND STEAM

p(MPa) =	4.500			4.600			4.700			4.800		
SAT t(°C)	257.41			258.75			260.07			261.37		
SAT.LIQ	1122.1	2.8612	.0012691	1128.8	2.8735	.0012725	1135.3	2.8855	.0012758	1141.8	2.8974	.0012792
SAT.VAP	2797.7	6.0191	.04404	2797.0	6.0097	.04304	2796.4	6.0004	.04208	2795.7	5.9913	.04116
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	4.5	.0002	.0009980	4.7	.0002	.0009979	4.8	.0002	.0009979	4.9	.0002	.0009978
10	46.4	.1506	.0009981	46.5	.1506	.0009981	46.6	.1506	.0009980	46.7	.1506	.0009980
20	88.1	.2954	.0009997	88.2	.2953	.0009996	88.3	.2953	.0009996	88.4	.2953	.0009996
30	129.8	.4351	.0010023	129.8	.4351	.0010023	129.9	.4351	.0010022	130.0	.4350	.0010022
40	171.4	.5704	.0010058	171.5	.5703	.0010058	171.6	.5703	.0010057	171.7	.5702	.0010057
50	213.1	.7014	.0010101	213.2	.7014	.0010101	213.3	.7013	.0010100	213.4	.7013	.0010100
60	254.8	.8286	.0010151	254.9	.8285	.0010151	255.0	.8285	.0010150	255.1	.8284	.0010150
70	296.6	.9521	.0010208	296.7	.9521	.0010207	296.8	.9520	.0010207	296.9	.9520	.0010206
80	338.5	1.0723	.0010271	338.5	1.0722	.0010270	338.6	1.0722	.0010270	338.7	1.0721	.0010269
90	380.4	1.1893	.0010339	380.4	1.1893	.0010339	380.5	1.1892	.0010338	380.6	1.1891	.0010338
100	422.4	1.3034	.0010414	422.4	1.3034	.0010414	422.5	1.3033	.0010413	422.6	1.3032	.0010413
110	464.5	1.4148	.0010495	464.6	1.4147	.0010494	464.6	1.4147	.0010494	464.7	1.4146	.0010493
120	506.7	1.5237	.0010582	506.8	1.5236	.0010581	506.9	1.5235	.0010580	507.0	1.5234	.0010580
130	549.2	1.6303	.0010674	549.2	1.6302	.0010674	549.3	1.6301	.0010673	549.4	1.6300	.0010673
140	591.8	1.7347	.0010774	591.9	1.7346	.0010773	591.9	1.7345	.0010773	592.0	1.7344	.0010772
150	634.6	1.8372	.0010880	634.7	1.8371	.0010879	634.8	1.8370	.0010879	634.8	1.8369	.0010878
160	677.8	1.9379	.0010994	677.8	1.9378	.0010993	677.9	1.9376	.0010992	677.9	1.9375	.0010991
170	721.2	2.0369	.0011115	721.2	2.0368	.0011114	721.3	2.0367	.0011113	721.3	2.0366	.0011113
180	764.9	2.1345	.0011245	765.0	2.1344	.0011244	765.0	2.1343	.0011243	765.1	2.1341	.0011243
190	809.0	2.2308	.0011385	809.1	2.2307	.0011384	809.1	2.2306	.0011383	809.2	2.2304	.0011382
200	853.6	2.3260	.0011535	853.6	2.3259	.0011534	853.7	2.3257	.0011533	853.7	2.3256	.0011532
210	898.6	2.4203	.0011697	898.7	2.4201	.0011695	898.7	2.4199	.0011694	898.7	2.4198	.0011693
220	944.3	2.5138	.0011872	944.3	2.5136	.0011871	944.3	2.5134	.0011870	944.4	2.5132	.0011868
230	990.6	2.6067	.0012063	990.6	2.6065	.0012062	990.6	2.6063	.0012060	990.7	2.6061	.0012059
240	1037.7	2.6995	.0012272	1037.7	2.6992	.0012271	1037.7	2.6990	.0012269	1037.7	2.6988	.0012268
250	1085.8	2.7922	.0012503	1085.8	2.7920	.0012501	1085.8	2.7917	.0012500	1085.8	2.7915	.0012498
260	2807.9	6.0382	.044540	2802.0	6.0190	.043278	1134.9	2.8848	.0012756	1134.9	2.8846	.0012754
270	2845.3	6.1078	.046392	2840.2	6.0899	.045124	2835.0	6.0722	.043907	2829.7	6.0545	.042736
280	2880.2	6.1714	.048128	2875.6	6.1547	.046849	2871.0	6.1380	.045622	2866.4	6.1214	.044443
290	2913.0	6.2303	.049770	2909.0	6.2144	.048477	2904.9	6.1986	.047237	2900.7	6.1829	.046047
300	2944.2	6.2852	.051336	2940.5	6.2700	.050027	2936.8	6.2549	.048772	2933.1	6.2399	.047569

TABLE 3 WATER AND STEAM

p(MPa) =	4.500			4.600			4.700			4.800		
SAT t(°C)	257.41			258.75			260.07			261.37		
SAT.LIQ	1122.1	2.8612	.0012691	1128.8	2.8735	.0012725	1135.3	2.8855	.0012758	1141.8	2.8974	.0012792
SAT.VAP	2797.7	6.0191	.04404	2797.0	6.0097	.04304	2796.4	6.0004	.04208	2795.7	5.9913	.04116
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	2974.0	6.3367	.052838	2970.7	6.3221	.051512	2967.3	6.3076	.050242	2963.9	6.2933	.049023
320	3002.6	6.3854	.054288	2999.6	6.3712	.052944	2996.5	6.3573	.051657	2993.4	6.3434	.050422
330	3030.3	6.4317	.055693	3027.5	6.4179	.054331	3024.7	6.4043	.053025	3021.8	6.3909	.051773
340	3057.2	6.4758	.057061	3054.6	6.4624	.055679	3052.0	6.4492	.054355	3049.4	6.4362	.053085
350	3083.3	6.5182	.058396	3080.9	6.5050	.056994	3078.5	6.4921	.055651	3076.1	6.4794	.054364
360	3108.9	6.5589	.059703	3106.7	6.5460	.058281	3104.4	6.5334	.056919	3102.2	6.5209	.055613
370	3134.0	6.5982	.060987	3131.9	6.5856	.059544	3129.8	6.5732	.058162	3127.7	6.5610	.056837
380	3158.7	6.6363	.062249	3156.7	6.6239	.060785	3154.8	6.6117	.059384	3152.8	6.5996	.058040
390	3183.0	6.6733	.063493	3181.2	6.6610	.062008	3179.3	6.6490	.060586	3177.5	6.6371	.059223
400	3207.1	6.7093	.064721	3205.3	6.6972	.063215	3203.6	6.6853	.061773	3201.8	6.6736	.060390
410	3230.9	6.7444	.065935	3229.2	6.7324	.064407	3227.6	6.7207	.062945	3225.9	6.7091	.061543
420	3254.5	6.7787	.067136	3252.9	6.7668	.065587	3251.3	6.7552	.064104	3249.7	6.7438	.062682
430	3277.9	6.8122	.068326	3276.4	6.8005	.066755	3274.9	6.7890	.065251	3273.4	6.7777	.063810
440	3301.2	6.8451	.069506	3299.8	6.8335	.067914	3298.3	6.8221	.066389	3296.9	6.8108	.064927
450	3324.4	6.8774	.070677	3323.0	6.8659	.069063	3321.6	6.8545	.067517	3320.3	6.8434	.066036
460	3347.5	6.9092	.071841	3346.2	6.8977	.070204	3344.9	6.8864	.068638	3343.5	6.8753	.067136
470	3370.5	6.9404	.072996	3369.3	6.9289	.071338	3368.0	6.9177	.069751	3366.7	6.9067	.068229
480	3393.5	6.9711	.074146	3392.3	6.9597	.072465	3391.1	6.9486	.070857	3389.8	6.9376	.069315
490	3416.4	7.0013	.075289	3415.3	6.9900	.073587	3414.1	6.9789	.071957	3412.9	6.9681	.070395
500	3439.3	7.0311	.076427	3438.2	7.0199	.074702	3437.1	7.0089	.073051	3435.9	6.9981	.071469
510	3462.2	7.0606	.077559	3461.1	7.0494	.075812	3460.0	7.0384	.074140	3458.9	7.0276	.072537
520	3485.1	7.0896	.078687	3484.1	7.0784	.076918	3483.0	7.0675	.075224	3481.9	7.0568	.073601
530	3508.0	7.1183	.079810	3507.0	7.1072	.078019	3505.9	7.0963	.076304	3504.9	7.0856	.074661
540	3530.9	7.1466	.080929	3529.9	7.1355	.079116	3528.9	7.1247	.077380	3527.9	7.1140	.075716
550	3553.8	7.1746	.082044	3552.8	7.1636	.080209	3551.9	7.1527	.078452	3550.9	7.1422	.076768
560	3576.7	7.2022	.083156	3575.8	7.1913	.081298	3574.8	7.1805	.079520	3573.9	7.1699	.077815
570	3599.6	7.2296	.084264	3598.7	7.2187	.082384	3597.8	7.2079	.080585	3596.9	7.1974	.078860
580	3622.6	7.2567	.085369	3621.7	7.2458	.083467	3620.9	7.2351	.081646	3620.0	7.2246	.079901
590	3645.6	7.2835	.086471	3644.8	7.2726	.084547	3643.9	7.2619	.082704	3643.1	7.2515	.080938
600	3668.6	7.3100	.087570	3667.8	7.2991	.085623	3667.0	7.2885	.083760	3666.2	7.2781	.081973

TABLE 3 WATER AND STEAM

p(MPa) =	4.500			4.600			4.700			4.800		
SAT t(°C)	257.41			258.75			260.07			261.37		
SAT.LIQ	1122.1	2.8612	.0012691	1128.8	2.8735	.0012725	1135.3	2.8855	.0012758	1141.8	2.8974	.0012792
SAT.VAP	2797.7	6.0191	.04404	2797.0	6.0097	.04304	2796.4	6.0004	.04208	2795.7	5.9913	.04116
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3691.7	7.3363	.088666	3690.9	7.3254	.086697	3690.1	7.3148	.084812	3689.3	7.3044	.083006
620	3714.8	7.3623	.089760	3714.0	7.3515	.087768	3713.2	7.3409	.085862	3712.4	7.3305	.084035
630	3737.9	7.3880	.090851	3737.2	7.3772	.088837	3736.4	7.3667	.086909	3735.6	7.3563	.085062
640	3761.1	7.4135	.091939	3760.3	7.4028	.089903	3759.6	7.3922	.087954	3758.9	7.3819	.086087
650	3784.3	7.4388	.093025	3783.6	7.4281	.090967	3782.9	7.4176	.088997	3782.1	7.4072	.087109
660	3807.5	7.4639	.094109	3806.8	7.4531	.092029	3806.1	7.4426	.090037	3805.5	7.4324	.088129
670	3830.8	7.4887	.095191	3830.2	7.4780	.093089	3829.5	7.4675	.091076	3828.8	7.4572	.089147
680	3854.2	7.5133	.096271	3853.5	7.5026	.094146	3852.9	7.4922	.092112	3852.2	7.4819	.090162
690	3877.5	7.5377	.097349	3876.9	7.5270	.095202	3876.3	7.5166	.093146	3875.6	7.5064	.091176
700	3901.0	7.5619	.098425	3900.3	7.5513	.096256	3899.7	7.5408	.094179	3899.1	7.5306	.092188
710	3924.4	7.5859	.099500	3923.8	7.5753	.097308	3923.2	7.5649	.095209	3922.6	7.5547	.093198
720	3947.9	7.6097	.10057	3947.4	7.5991	.098358	3946.8	7.5887	.096238	3946.2	7.5785	.094207
730	3971.5	7.6333	.10164	3970.9	7.6227	.099407	3970.4	7.6123	.097266	3969.8	7.6022	.095214
740	3995.1	7.6567	.10271	3994.5	7.6461	.10045	3994.0	7.6358	.098291	3993.4	7.6256	.096219
750	4018.8	7.6799	.10378	4018.2	7.6694	.10150	4017.7	7.6590	.099315	4017.1	7.6489	.097223
760	4042.4	7.7030	.10485	4041.9	7.6924	.10254	4041.4	7.6821	.10034	4040.9	7.6720	.098225
770	4066.2	7.7258	.10591	4065.7	7.7153	.10359	4065.2	7.7050	.10136	4064.7	7.6949	.099225
780	4090.0	7.7485	.10697	4089.5	7.7380	.10463	4089.0	7.7277	.10238	4088.5	7.7176	.10022
790	4113.8	7.7711	.10804	4113.3	7.7605	.10567	4112.8	7.7503	.10340	4112.4	7.7402	.10122
800	4137.7	7.7934	.10910	4137.2	7.7829	.10670	4136.8	7.7726	.10441	4136.3	7.7626	.10222

TABLE 3 WATER AND STEAM

p(MPa)	= 4.900			= 5.000			= 5.200			= 5.400		
SAT t(°C)	262.65			263.91			266.37			268.76		
SAT.LIQ	1148.2	2.9091	.0012825	1154.5	2.9206	.0012858	1166.8	2.9431	.0012924	1178.9	2.9650	.0012990
SAT.VAP	2794.9	5.9824	.04028	2794.2	5.9735	.03943	2792.6	5.9561	.03782	2790.8	5.9392	.03633
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	5.0	.0002	.0009978	5.1	.0002	.0009977	5.3	.0002	.0009976	5.5	.0003	.0009975
10	46.8	.1506	.0009979	46.9	.1505	.0009979	47.1	.1505	.0009978	47.3	.1505	.0009977
20	88.5	.2953	.0009995	88.6	.2952	.0009995	88.7	.2952	.0009994	88.9	.2952	.0009993
30	130.1	.4350	.0010021	130.2	.4350	.0010021	130.4	.4349	.0010020	130.6	.4348	.0010019
40	171.8	.5702	.0010056	171.9	.5702	.0010056	172.0	.5701	.0010055	172.2	.5700	.0010054
50	213.5	.7012	.0010099	213.5	.7012	.0010099	213.7	.7011	.0010098	213.9	.7010	.0010097
60	255.2	.8284	.0010149	255.3	.8283	.0010149	255.4	.8282	.0010148	255.6	.8281	.0010147
70	296.9	.9519	.0010206	297.0	.9518	.0010205	297.2	.9517	.0010204	297.4	.9516	.0010204
80	338.8	1.0720	.0010269	338.8	1.0720	.0010268	339.0	1.0718	.0010267	339.2	1.0717	.0010266
90	380.7	1.1890	.0010337	380.7	1.1890	.0010337	380.9	1.1888	.0010336	381.1	1.1887	.0010335
100	422.7	1.3031	.0010412	422.7	1.3030	.0010412	422.9	1.3029	.0010411	423.0	1.3027	.0010410
110	464.8	1.4145	.0010493	464.9	1.4144	.0010492	465.0	1.4142	.0010491	465.1	1.4141	.0010490
120	507.0	1.5233	.0010579	507.1	1.5233	.0010579	507.2	1.5231	.0010578	507.4	1.5229	.0010576
130	549.4	1.6299	.0010672	549.5	1.6298	.0010671	549.7	1.6296	.0010670	549.8	1.6294	.0010669
140	592.1	1.7343	.0010771	592.1	1.7342	.0010771	592.3	1.7340	.0010769	592.4	1.7338	.0010768
150	634.9	1.8367	.0010877	635.0	1.8366	.0010877	635.1	1.8364	.0010875	635.2	1.8362	.0010874
160	678.0	1.9374	.0010991	678.1	1.9373	.0010990	678.2	1.9371	.0010989	678.3	1.9368	.0010987
170	721.4	2.0364	.0011112	721.4	2.0363	.0011111	721.6	2.0361	.0011110	721.7	2.0358	.0011108
180	765.1	2.1340	.0011242	765.2	2.1339	.0011241	765.3	2.1336	.0011239	765.4	2.1333	.0011237
190	809.2	2.2303	.0011381	809.3	2.2301	.0011380	809.4	2.2298	.0011378	809.4	2.2295	.0011376
200	853.7	2.3254	.0011531	853.8	2.3253	.0011530	853.9	2.3249	.0011528	854.0	2.3246	.0011526
210	898.8	2.4196	.0011692	898.8	2.4194	.0011691	898.9	2.4191	.0011689	899.0	2.4188	.0011687
220	944.4	2.5130	.0011867	944.4	2.5129	.0011866	944.5	2.5125	.0011863	944.5	2.5121	.0011861
230	990.7	2.6059	.0012057	990.7	2.6057	.0012056	990.7	2.6054	.0012053	990.8	2.6050	.0012050
240	1037.8	2.6986	.0012266	1037.8	2.6984	.0012264	1037.8	2.6979	.0012261	1037.8	2.6975	.0012258
250	1085.8	2.7912	.0012496	1085.8	2.7910	.0012494	1085.8	2.7905	.0012490	1085.8	2.7900	.0012487
260	1134.9	2.8843	.0012752	1134.9	2.8840	.0012750	1134.9	2.8835	.0012746	1134.8	2.8829	.0012741
270	2824.3	6.0368	.041610	2818.9	6.0192	.040526	2807.7	5.9841	.038471	2796.1	5.9490	.036553
280	2861.7	6.1049	.043310	2856.9	6.0886	.042219	2847.1	6.0560	.040156	2837.0	6.0236	.038235
290	2896.5	6.1674	.044903	2892.2	6.1519	.043803	2883.6	6.1214	.041725	2874.7	6.0912	.039792
300	2929.3	6.2252	.046412	2925.5	6.2105	.045301	2917.8	6.1815	.043201	2909.8	6.1530	.041251

TABLE 3 WATER AND STEAM

p(MPa) =	4.900			5.000			5.200			5.400		
SAT t(°C)	262.65			263.91			266.37			268.76		
SAT.LIQ	1148.2	2.9091	.0012825	1154.5	2.9206	.0012858	1166.8	2.9431	.0012924	1178.9	2.9650	.0012990
SAT.VAP	2794.9	5.9824	.04028	2794.2	5.9735	.03943	2792.6	5.9561	.03782	2790.8	5.9392	.03633
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	2960.5	6.2791	.047853	2957.0	6.2651	.046728	2950.0	6.2374	.044604	2942.9	6.2102	.042633
320	2990.3	6.3298	.049236	2987.2	6.3163	.048097	2980.8	6.2897	.045947	2974.3	6.2636	.043952
330	3019.0	6.3777	.050572	3016.1	6.3647	.049417	3010.3	6.3390	.047239	3004.4	6.3138	.045219
340	3046.7	6.4233	.051867	3044.1	6.4106	.050697	3038.7	6.3857	.048489	3033.3	6.3614	.046442
350	3073.6	6.4669	.053128	3071.2	6.4545	.051941	3066.2	6.4302	.049703	3061.2	6.4066	.047628
360	3099.9	6.5087	.054360	3097.6	6.4966	.053156	3093.0	6.4729	.050887	3088.3	6.4498	.048783
370	3125.6	6.5489	.055566	3123.4	6.5371	.054346	3119.1	6.5138	.052044	3114.8	6.4912	.049911
380	3150.8	6.5878	.056751	3148.8	6.5762	.055513	3144.8	6.5533	.053178	3140.7	6.5312	.051016
390	3175.6	6.6255	.057916	3173.7	6.6140	.056660	3169.9	6.5916	.054293	3166.1	6.5698	.052100
400	3200.0	6.6621	.059064	3198.3	6.6508	.057791	3194.7	6.6287	.055390	3191.1	6.6072	.053166
410	3224.2	6.6977	.060198	3222.5	6.6866	.058906	3219.2	6.6647	.056472	3215.7	6.6436	.054217
420	3248.1	6.7325	.061318	3246.6	6.7215	.060009	3243.3	6.6999	.057540	3240.1	6.6790	.055254
430	3271.9	6.7665	.062427	3270.4	6.7556	.061099	3267.3	6.7342	.058597	3264.2	6.7135	.056279
440	3295.4	6.7998	.063526	3294.0	6.7890	.062180	3291.1	6.7678	.059643	3288.2	6.7473	.057293
450	3318.9	6.8324	.064615	3317.5	6.8217	.063250	3314.7	6.8007	.060679	3311.9	6.7804	.058297
460	3342.2	6.8645	.065696	3340.9	6.8538	.064313	3338.2	6.8330	.061707	3335.5	6.8128	.059293
470	3365.4	6.8960	.066769	3364.2	6.8853	.065368	3361.6	6.8647	.062727	3359.0	6.8447	.060281
480	3388.6	6.9269	.067836	3387.4	6.9164	.066416	3384.9	6.8958	.063740	3382.5	6.8760	.061262
490	3411.7	6.9574	.068896	3410.5	6.9469	.067458	3408.2	6.9265	.064746	3405.8	6.9068	.062236
500	3434.8	6.9874	.069951	3433.7	6.9770	.068494	3431.4	6.9567	.065747	3429.1	6.9371	.063204
510	3457.8	7.0171	.071000	3456.7	7.0067	.069524	3454.5	6.9865	.066743	3452.3	6.9669	.064167
520	3480.9	7.0463	.072045	3479.8	7.0360	.070550	3477.7	7.0158	.067733	3475.6	6.9964	.065125
530	3503.9	7.0751	.073085	3502.9	7.0648	.071571	3500.8	7.0448	.068720	3498.8	7.0255	.066079
540	3526.9	7.1036	.074120	3525.9	7.0934	.072589	3523.9	7.0734	.069701	3521.9	7.0542	.067028
550	3549.9	7.1318	.075152	3549.0	7.1215	.073602	3547.1	7.1017	.070679	3545.1	7.0825	.067973
560	3573.0	7.1596	.076181	3572.0	7.1494	.074611	3570.2	7.1296	.071653	3568.3	7.1105	.068914
570	3596.0	7.1871	.077205	3595.1	7.1769	.075617	3593.3	7.1572	.072624	3591.5	7.1382	.069852
580	3619.1	7.2143	.078227	3618.2	7.2042	.076620	3616.5	7.1845	.073591	3614.7	7.1655	.070786
590	3642.2	7.2412	.079245	3641.3	7.2311	.077619	3639.6	7.2115	.074555	3637.9	7.1926	.071718
600	3665.3	7.2678	.080260	3664.5	7.2578	.078616	3662.8	7.2382	.075516	3661.2	7.2194	.072646

TABLE 3 WATER AND STEAM

p(MPa)	= 4.900			= 5.000			= 5.200			= 5.400		
SAT t(°C)	262.65			263.91			266.37			268.76		
SAT.LIQ	1148.2	2.9091	.0012825	1154.5	2.9206	.0012858	1166.8	2.9431	.0012924	1178.9	2.9650	.0012990
SAT.VAP	2794.9	5.9824	.04028	2794.2	5.9735	.03943	2792.6	5.9561	.03782	2790.8	5.9392	.03633
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3688.5	7.2942	.081273	3687.7	7.2842	.079609	3686.1	7.2647	.076474	3684.5	7.2459	.073572
620	3711.7	7.3203	.082283	3710.9	7.3103	.080600	3709.3	7.2909	.077430	3707.8	7.2721	.074494
630	3734.9	7.3462	.083290	3734.1	7.3362	.081589	3732.6	7.3168	.078383	3731.1	7.2981	.075415
640	3758.1	7.3718	.084295	3757.4	7.3618	.082575	3755.9	7.3425	.079334	3754.5	7.3238	.076332
650	3781.4	7.3971	.085298	3780.7	7.3872	.083559	3779.3	7.3679	.080282	3777.8	7.3493	.077248
660	3804.8	7.4223	.086298	3804.1	7.4124	.084540	3802.7	7.3931	.081228	3801.3	7.3745	.078161
670	3828.1	7.4472	.087296	3827.5	7.4373	.085520	3826.1	7.4181	.082172	3824.7	7.3996	.079072
680	3851.5	7.4719	.088292	3850.9	7.4620	.086497	3849.6	7.4428	.083114	3848.3	7.4244	.079981
690	3875.0	7.4963	.089287	3874.3	7.4865	.087473	3873.1	7.4674	.084054	3871.8	7.4489	.080888
700	3898.5	7.5206	.090279	3897.9	7.5108	.088446	3896.6	7.4917	.084992	3895.4	7.4733	.081794
710	3922.0	7.5447	.091270	3921.4	7.5349	.089418	3920.2	7.5158	.085928	3919.0	7.4974	.082697
720	3945.6	7.5685	.092258	3945.0	7.5587	.090388	3943.8	7.5397	.086863	3942.7	7.5214	.083599
730	3969.2	7.5922	.093246	3968.7	7.5824	.091356	3967.5	7.5634	.087796	3966.4	7.5451	.084499
740	3992.9	7.6157	.094231	3992.3	7.6059	.092323	3991.2	7.5870	.088727	3990.1	7.5687	.085397
750	4016.6	7.6390	.095215	4016.1	7.6292	.093288	4015.0	7.6103	.089656	4013.9	7.5920	.086294
760	4040.4	7.6621	.096198	4039.8	7.6523	.094252	4038.8	7.6334	.090585	4037.7	7.6152	.087189
770	4064.2	7.6850	.097179	4063.6	7.6753	.095214	4062.6	7.6564	.091511	4061.6	7.6382	.088083
780	4088.0	7.7077	.098158	4087.5	7.6980	.096175	4086.5	7.6792	.092437	4085.5	7.6610	.088976
790	4111.9	7.7303	.099137	4111.4	7.7206	.097134	4110.4	7.7018	.093361	4109.5	7.6837	.089867
800	4135.8	7.7527	.10011	4135.3	7.7431	.098093	4134.4	7.7243	.094284	4133.5	7.7061	.090757

TABLE 3 WATER AND STEAM

p(MPa) =	5.600			5.800			6.000			6.200		
SAT t(°C)	271.09			273.35			275.55			277.70		
SAT.LIQ	1190.8	2.9863	.0013056	1202.3	3.0071	.0013121	1213.7	3.0273	.0013187	1224.8	3.0471	.0013252
SAT.VAP	2789.0	5.9227	.03495	2787.0	5.9066	.03365	2785.0	5.8908	.03244	2782.9	5.8753	.03130
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	5.7	.0003	.0009974	5.9	.0003	.0009973	6.1	.0003	.0009972	6.3	.0003	.0009971
10	47.4	.1505	.0009976	47.6	.1505	.0009975	47.8	.1505	.0009974	48.0	.1504	.0009973
20	89.1	.2951	.0009992	89.3	.2951	.0009991	89.5	.2950	.0009990	89.7	.2950	.0009989
30	130.8	.4348	.0010018	130.9	.4347	.0010017	131.1	.4347	.0010016	131.3	.4346	.0010016
40	172.4	.5699	.0010053	172.6	.5699	.0010053	172.7	.5698	.0010052	172.9	.5697	.0010051
50	214.1	.7009	.0010096	214.2	.7008	.0010095	214.4	.7007	.0010094	214.6	.7006	.0010094
60	255.8	.8280	.0010146	255.9	.8279	.0010145	256.1	.8278	.0010144	256.3	.8277	.0010143
70	297.5	.9515	.0010203	297.7	.9514	.0010202	297.8	.9512	.0010201	298.0	.9511	.0010200
80	339.3	1.0716	.0010265	339.5	1.0714	.0010264	339.6	1.0713	.0010263	339.8	1.0712	.0010262
90	381.2	1.1885	.0010334	381.4	1.1884	.0010333	381.5	1.1883	.0010332	381.7	1.1881	.0010331
100	423.2	1.3026	.0010408	423.3	1.3024	.0010407	423.5	1.3023	.0010406	423.6	1.3021	.0010405
110	465.3	1.4139	.0010489	465.4	1.4137	.0010488	465.6	1.4136	.0010487	465.7	1.4134	.0010486
120	507.5	1.5227	.0010575	507.7	1.5225	.0010574	507.8	1.5224	.0010573	507.9	1.5222	.0010572
130	549.9	1.6292	.0010668	550.1	1.6290	.0010667	550.2	1.6288	.0010665	550.3	1.6286	.0010664
140	592.5	1.7336	.0010767	592.6	1.7334	.0010766	592.8	1.7332	.0010764	592.9	1.7330	.0010763
150	635.3	1.8360	.0010873	635.5	1.8358	.0010871	635.6	1.8355	.0010870	635.7	1.8353	.0010869
160	678.4	1.9366	.0010986	678.5	1.9364	.0010984	678.6	1.9361	.0010983	678.8	1.9359	.0010981
170	721.8	2.0356	.0011106	721.9	2.0353	.0011105	722.0	2.0351	.0011103	722.1	2.0348	.0011102
180	765.5	2.1331	.0011236	765.6	2.1328	.0011234	765.7	2.1325	.0011232	765.8	2.1323	.0011231
190	809.5	2.2293	.0011374	809.6	2.2290	.0011373	809.7	2.2287	.0011371	809.8	2.2284	.0011369
200	854.0	2.3243	.0011524	854.1	2.3240	.0011522	854.2	2.3237	.0011519	854.3	2.3234	.0011517
210	899.0	2.4184	.0011684	899.1	2.4181	.0011682	899.2	2.4178	.0011680	899.3	2.4174	.0011678
220	944.6	2.5118	.0011858	944.7	2.5114	.0011856	944.7	2.5110	.0011853	944.8	2.5107	.0011851
230	990.8	2.6046	.0012048	990.9	2.6042	.0012045	990.9	2.6038	.0012042	991.0	2.6034	.0012039
240	1037.8	2.6971	.0012255	1037.9	2.6966	.0012252	1037.9	2.6962	.0012249	1037.9	2.6958	.0012245
250	1085.8	2.7896	.0012483	1085.8	2.7891	.0012480	1085.8	2.7886	.0012476	1085.8	2.7881	.0012472
260	1134.8	2.8824	.0012737	1134.8	2.8819	.0012733	1134.7	2.8813	.0012729	1134.7	2.8808	.0012724
270	1185.2	2.9761	.0013023	1185.1	2.9755	.0013018	1185.1	2.9749	.0013013	1185.0	2.9742	.0013008
280	2826.7	5.9914	.036439	2816.0	5.9592	.034756	2804.9	5.9270	.033173	2793.5	5.8946	.031679
290	2865.6	6.0612	.037989	2856.3	6.0314	.036301	2846.7	6.0017	.034718	2836.8	5.9721	.033227
300	2901.7	6.1248	.039434	2893.5	6.0969	.037736	2885.0	6.0692	.036145	2876.3	6.0418	.034650

TABLE 3 WATER AND STEAM

p(MPa) =	5.600			5.800			6.000			6.200		
SAT t(°C)	271.09			273.35			275.55			277.70		
SAT.LIQ	1190.8	2.9863	.0013056	1202.3	3.0071	.0013121	1213.7	3.0273	.0013187	1224.8	3.0471	.0013252
SAT.VAP	2789.0	5.9227	.03495	2787.0	5.9066	.03365	2785.0	5.8908	.03244	2782.9	5.8753	.03130
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	2935.6	6.1834	.040798	2928.2	6.1570	.039085	2920.7	6.1310	.037481	2913.0	6.1051	.035975
320	2967.7	6.2380	.042096	2961.0	6.2128	.040364	2954.2	6.1880	.038744	2947.3	6.1635	.037224
330	2998.4	6.2892	.043340	2992.3	6.2650	.041588	2986.1	6.2412	.039949	2979.8	6.2178	.038413
340	3027.7	6.3375	.044539	3022.2	6.3142	.042764	3016.5	6.2913	.041105	3010.8	6.2688	.039551
350	3056.1	6.3834	.045700	3051.0	6.3608	.043902	3045.8	6.3386	.042222	3040.5	6.3168	.040648
360	3083.6	6.4272	.046828	3078.9	6.4052	.045006	3074.0	6.3836	.043304	3069.2	6.3625	.041710
370	3110.4	6.4692	.047929	3106.0	6.4477	.046082	3101.5	6.4267	.044357	3097.0	6.4061	.042742
380	3136.6	6.5096	.049006	3132.4	6.4885	.047134	3128.3	6.4680	.045385	3124.0	6.4478	.043748
390	3162.2	6.5486	.050062	3158.4	6.5279	.048164	3154.4	6.5077	.046391	3150.5	6.4880	.044732
400	3187.5	6.5863	.051100	3183.8	6.5660	.049176	3180.1	6.5462	.047379	3176.4	6.5268	.045697
410	3212.3	6.6230	.052122	3208.9	6.6030	.050171	3205.4	6.5834	.048350	3201.9	6.5644	.046645
420	3236.9	6.6586	.053130	3233.6	6.6389	.051153	3230.3	6.6196	.049306	3227.0	6.6009	.047578
430	3261.2	6.6934	.054126	3258.0	6.6739	.052121	3254.9	6.6549	.050249	3251.8	6.6364	.048498
440	3285.2	6.7274	.055111	3282.3	6.7081	.053078	3279.3	6.6893	.051181	3276.3	6.6710	.049406
450	3309.1	6.7607	.056085	3306.3	6.7416	.054026	3303.5	6.7230	.052103	3300.6	6.7049	.050304
460	3332.9	6.7933	.057051	3330.2	6.7743	.054964	3327.4	6.7559	.053016	3324.7	6.7380	.051192
470	3356.5	6.8253	.058009	3353.9	6.8065	.055894	3351.3	6.7882	.053920	3348.7	6.7704	.052073
480	3380.0	6.8567	.058960	3377.5	6.8381	.056817	3375.0	6.8199	.054817	3372.5	6.8023	.052946
490	3403.4	6.8876	.059904	3401.0	6.8691	.057734	3398.6	6.8511	.055707	3396.2	6.8336	.053812
500	3426.8	6.9181	.060843	3424.5	6.8996	.058644	3422.2	6.8818	.056592	3419.9	6.8644	.054671
510	3450.1	6.9480	.061776	3447.9	6.9297	.059549	3445.7	6.9119	.057470	3443.5	6.8947	.055525
520	3473.4	6.9776	.062703	3471.3	6.9594	.060448	3469.1	6.9417	.058344	3467.0	6.9245	.056374
530	3496.7	7.0068	.063626	3494.6	6.9886	.061343	3492.5	6.9710	.059212	3490.5	6.9540	.057218
540	3519.9	7.0355	.064545	3517.9	7.0175	.062234	3515.9	7.0000	.060076	3513.9	6.9830	.058058
550	3543.2	7.0639	.065460	3541.2	7.0460	.063120	3539.3	7.0285	.060937	3537.4	7.0116	.058894
560	3566.4	7.0920	.066371	3564.6	7.0741	.064003	3562.7	7.0568	.061793	3560.8	7.0399	.059725
570	3589.7	7.1198	.067278	3587.9	7.1019	.064882	3586.0	7.0846	.062646	3584.2	7.0679	.060553
580	3612.9	7.1472	.068182	3611.2	7.1294	.065758	3609.4	7.1122	.063495	3607.7	7.0955	.061378
590	3636.2	7.1743	.069083	3634.5	7.1566	.066630	3632.8	7.1395	.064341	3631.1	7.1228	.062199
600	3659.5	7.2011	.069981	3657.9	7.1835	.067500	3656.2	7.1664	.065184	3654.5	7.1498	.063018

TABLE 3 WATER AND STEAM

p(MPa)	= 5.600			= 5.800			= 6.000			= 6.200		
SAT (°C)	271.09			273.35			275.55			277.70		
SAT.LIQ	1190.8	2.9863	.0013056	1202.3	3.0071	.0013121	1213.7	3.0273	.0013187	1224.8	3.0471	.0013252
SAT.VAP	2789.0	5.9227	.03495	2787.0	5.9066	.03365	2785.0	5.8908	.03244	2782.9	5.8753	.03130
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3682.8	7.2277	.070876	3681.2	7.2101	.068367	3679.6	7.1931	.066024	3678.0	7.1766	.063833
620	3706.2	7.2540	.071768	3704.6	7.2365	.069231	3703.1	7.2195	.066862	3701.5	7.2030	.064646
630	3729.6	7.2800	.072658	3728.1	7.2625	.070092	3726.5	7.2456	.067697	3725.0	7.2292	.065456
640	3753.0	7.3058	.073546	3751.5	7.2884	.070951	3750.0	7.2715	.068529	3748.6	7.2551	.066264
650	3776.4	7.3313	.074431	3775.0	7.3139	.071807	3773.5	7.2971	.069359	3772.1	7.2808	.067069
660	3799.9	7.3566	.075313	3798.5	7.3393	.072662	3797.1	7.3225	.070187	3795.7	7.3062	.067872
670	3823.4	7.3817	.076194	3822.0	7.3644	.073514	3820.7	7.3476	.071013	3819.3	7.3314	.068673
680	3846.9	7.4065	.077072	3845.6	7.3892	.074364	3844.3	7.3725	.071837	3843.0	7.3563	.069472
690	3870.5	7.4311	.077949	3869.2	7.4139	.075212	3868.0	7.3972	.072658	3866.7	7.3810	.070269
700	3894.1	7.4555	.078824	3892.9	7.4383	.076059	3891.7	7.4217	.073478	3890.4	7.4056	.071064
710	3917.8	7.4797	.079697	3916.6	7.4625	.076903	3915.4	7.4459	.074296	3914.2	7.4298	.071857
720	3941.5	7.5037	.080568	3940.3	7.4866	.077746	3939.1	7.4700	.075112	3938.0	7.4539	.072649
730	3965.2	7.5275	.081437	3964.1	7.5104	.078587	3962.9	7.4938	.075927	3961.8	7.4778	.073438
740	3989.0	7.5510	.082305	3987.9	7.5340	.079426	3986.8	7.5175	.076740	3985.7	7.5015	.074226
750	4012.8	7.5744	.083171	4011.7	7.5574	.080264	4010.7	7.5409	.077551	4009.6	7.5250	.075013
760	4036.7	7.5976	.084036	4035.6	7.5807	.081101	4034.6	7.5642	.078361	4033.5	7.5483	.075798
770	4060.6	7.6207	.084900	4059.6	7.6037	.081936	4058.6	7.5873	.079170	4057.5	7.5714	.076582
780	4084.5	7.6435	.085762	4083.5	7.6266	.082769	4082.6	7.6102	.079977	4081.6	7.5943	.077364
790	4108.5	7.6662	.086622	4107.6	7.6493	.083602	4106.6	7.6329	.080782	4105.6	7.6171	.078145
800	4132.5	7.6887	.087482	4131.6	7.6718	.084432	4130.7	7.6554	.081587	4129.7	7.6396	.078925

TABLE 3 WATER AND STEAM

p(MPa) =	6.400			6.600			6.800			7.000		
SAT t(°C)	279.79			281.84			283.84			285.79		
SAT.LIQ	1235.7	3.0664	.0013317	1246.5	3.0853	.0013383	1257.0	3.1038	.0013448	1267.4	3.1219	.0013513
SAT.VAP	2780.6	5.8601	.03023	2778.3	5.8452	.02922	2775.9	5.8306	.02827	2773.5	5.8162	.02737
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	6.5	.0003	.0009970	6.7	.0003	.0009969	6.9	.0003	.0009968	7.1	.0004	.0009967
10	48.2	.1504	.0009973	48.4	.1504	.0009972	48.6	.1504	.0009971	48.8	.1504	.0009970
20	89.9	.2949	.0009988	90.1	.2949	.0009987	90.2	.2949	.0009987	90.4	.2948	.0009986
30	131.5	.4345	.0010015	131.7	.4345	.0010014	131.8	.4344	.0010013	132.0	.4344	.0010012
40	173.1	.5696	.0010050	173.3	.5695	.0010049	173.5	.5695	.0010048	173.6	.5694	.0010047
50	214.7	.7005	.0010093	214.9	.7004	.0010092	215.1	.7003	.0010091	215.3	.7003	.0010090
60	256.4	.8276	.0010143	256.6	.8275	.0010142	256.8	.8274	.0010141	256.9	.8273	.0010140
70	298.2	.9510	.0010199	298.3	.9509	.0010198	298.5	.9508	.0010197	298.7	.9506	.0010196
80	340.0	1.0711	.0010261	340.1	1.0709	.0010261	340.3	1.0708	.0010260	340.4	1.0707	.0010259
90	381.8	1.1880	.0010330	382.0	1.1878	.0010329	382.1	1.1877	.0010328	382.3	1.1875	.0010327
100	423.8	1.3020	.0010404	423.9	1.3018	.0010403	424.1	1.3016	.0010402	424.2	1.3015	.0010401
110	465.9	1.4132	.0010485	466.0	1.4131	.0010484	466.2	1.4129	.0010482	466.3	1.4127	.0010481
120	508.1	1.5220	.0010571	508.2	1.5218	.0010570	508.4	1.5216	.0010569	508.5	1.5215	.0010567
130	550.5	1.6284	.0010663	550.6	1.6283	.0010662	550.7	1.6281	.0010661	550.9	1.6279	.0010660
140	593.0	1.7328	.0010762	593.2	1.7326	.0010761	593.3	1.7324	.0010759	593.4	1.7321	.0010758
150	635.8	1.8351	.0010867	636.0	1.8349	.0010866	636.1	1.8347	.0010865	636.2	1.8345	.0010863
160	678.9	1.9357	.0010980	679.0	1.9354	.0010978	679.1	1.9352	.0010977	679.2	1.9350	.0010976
170	722.2	2.0346	.0011100	722.3	2.0343	.0011099	722.4	2.0341	.0011097	722.6	2.0338	.0011096
180	765.9	2.1320	.0011229	766.0	2.1317	.0011227	766.1	2.1315	.0011226	766.2	2.1312	.0011224
190	809.9	2.2281	.0011367	810.0	2.2278	.0011365	810.1	2.2275	.0011363	810.2	2.2273	.0011362
200	854.4	2.3231	.0011515	854.5	2.3228	.0011513	854.5	2.3225	.0011512	854.6	2.3222	.0011510
210	899.3	2.4171	.0011675	899.4	2.4168	.0011673	899.5	2.4164	.0011671	899.5	2.4161	.0011669
220	944.8	2.5103	.0011849	944.9	2.5100	.0011846	945.0	2.5096	.0011844	945.0	2.5092	.0011841
230	991.0	2.6030	.0012037	991.0	2.6026	.0012034	991.1	2.6022	.0012031	991.1	2.6018	.0012028
240	1037.9	2.6953	.0012242	1037.9	2.6949	.0012239	1038.0	2.6945	.0012236	1038.0	2.6940	.0012233
250	1085.8	2.7876	.0012469	1085.8	2.7872	.0012465	1085.8	2.7867	.0012462	1085.8	2.7862	.0012458
260	1134.7	2.8803	.0012720	1134.6	2.8797	.0012716	1134.6	2.8792	.0012712	1134.6	2.8787	.0012708
270	1184.9	2.9736	.0013003	1184.9	2.9730	.0012998	1184.8	2.9724	.0012993	1184.7	2.9719	.0012988
280	2781.6	5.8619	.030265	1236.7	3.0677	.0013319	1236.6	3.0670	.0013313	1236.5	3.0663	.0013307
290	2826.6	5.9425	.031821	2816.1	5.9129	.030490	2805.3	5.8830	.029226	2794.1	5.8530	.028024
300	2867.5	6.0144	.033241	2858.4	5.9872	.031911	2849.0	5.9599	.030652	2839.4	5.9327	.029457

TABLE 3 WATER AND STEAM

p(MPa)	= 6.400			= 6.600			= 6.800			= 7.000		
SAT t(°C)	279.79			281.84			283.84			285.79		
SAT.LIQ	1235.7	3.0664	.0013317	1246.5	3.0853	.0013383	1257.0	3.1038	.0013448	1267.4	3.1219	.0013513
SAT.VAP	2780.6	5.8601	.03023	2778.3	5.8452	.02922	2775.9	5.8306	.02827	2773.5	5.8162	.02737
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	2905.1	6.0796	.034559	2897.1	6.0542	.033223	2888.9	6.0289	.031960	2880.5	6.0037	.030765
320	2940.3	6.1393	.035796	2933.1	6.1154	.034450	2925.8	6.0917	.033180	2918.3	6.0681	.031978
330	2973.4	6.1948	.036970	2966.9	6.1720	.035611	2960.3	6.1495	.034329	2953.6	6.1272	.033118
340	3004.9	6.2466	.038092	2999.0	6.2248	.036718	2993.1	6.2033	.035423	2987.0	6.1820	.034199
350	3035.1	6.2955	.039170	3029.7	6.2744	.037781	3024.2	6.2537	.036470	3018.7	6.2333	.035233
360	3064.2	6.3418	.040213	3059.2	6.3214	.038806	3054.2	6.3014	.037480	3049.1	6.2817	.036228
370	3092.4	6.3859	.041226	3087.8	6.3661	.039800	3083.1	6.3467	.038457	3078.4	6.3276	.037190
380	3119.8	6.4282	.042212	3115.5	6.4089	.040768	3111.1	6.3899	.039407	3106.7	6.3714	.038123
390	3146.5	6.4688	.043175	3142.5	6.4499	.041712	3138.4	6.4314	.040333	3134.3	6.4133	.039033
400	3172.7	6.5079	.044119	3168.9	6.4894	.042636	3165.1	6.4713	.041239	3161.2	6.4536	.039922
410	3198.4	6.5458	.045045	3194.8	6.5277	.043542	3191.2	6.5099	.042127	3187.6	6.4925	.040792
420	3223.7	6.5826	.045957	3220.3	6.5647	.044434	3216.9	6.5472	.042999	3213.5	6.5301	.041646
430	3248.6	6.6183	.046855	3245.4	6.6007	.045311	3242.2	6.5835	.043858	3239.0	6.5666	.042487
440	3273.3	6.6532	.047741	3270.3	6.6358	.046177	3267.2	6.6188	.044704	3264.2	6.6022	.043315
450	3297.7	6.6872	.048617	3294.9	6.6700	.047031	3292.0	6.6532	.045539	3289.1	6.6368	.044131
460	3322.0	6.7205	.049483	3319.2	6.7035	.047877	3316.5	6.6869	.046364	3313.7	6.6707	.044938
470	3346.1	6.7531	.050341	3343.4	6.7363	.048713	3340.8	6.7198	.047181	3338.1	6.7038	.045737
480	3370.0	6.7851	.051191	3367.5	6.7684	.049542	3365.0	6.7521	.047990	3362.4	6.7362	.046527
490	3393.8	6.8166	.052034	3391.4	6.8000	.050364	3389.0	6.7838	.048792	3386.5	6.7680	.047310
500	3417.6	6.8475	.052871	3415.2	6.8310	.051180	3412.9	6.8150	.049588	3410.6	6.7993	.048086
510	3441.2	6.8779	.053702	3439.0	6.8615	.051989	3436.7	6.8456	.050377	3434.5	6.8300	.048857
520	3464.8	6.9078	.054528	3462.7	6.8916	.052794	3460.5	6.8757	.051161	3458.3	6.8603	.049622
530	3488.4	6.9373	.055349	3486.3	6.9212	.053593	3484.2	6.9055	.051941	3482.1	6.8901	.050382
540	3511.9	6.9665	.056166	3509.9	6.9504	.054388	3507.9	6.9347	.052715	3505.9	6.9195	.051138
550	3535.4	6.9952	.056978	3533.5	6.9792	.055179	3531.5	6.9636	.053486	3529.6	6.9485	.051889
560	3558.9	7.0236	.057787	3557.0	7.0076	.055966	3555.1	6.9922	.054252	3553.3	6.9771	.052636
570	3582.4	7.0516	.058592	3580.6	7.0357	.056749	3578.7	7.0203	.055015	3576.9	7.0053	.053380
580	3605.9	7.0793	.059393	3604.1	7.0635	.057529	3602.3	7.0481	.055774	3600.6	7.0332	.054120
590	3629.4	7.1067	.060192	3627.7	7.0909	.058305	3625.9	7.0756	.056530	3624.2	7.0608	.054856
600	3652.9	7.1337	.060987	3651.2	7.1181	.059079	3649.6	7.1028	.057283	3647.9	7.0880	.055590

TABLE 3 WATER AND STEAM

p(MPa) =	6.400			6.600			6.800			7.000		
SAT t(°C)	279.79			281.84			283.84			285.79		
SAT.LIQ	1235.7	3.0664	.0013317	1246.5	3.0853	.0013383	1257.0	3.1038	.0013448	1267.4	3.1219	.0013513
SAT.VAP	2780.6	5.8601	.03023	2778.3	5.8452	.02922	2775.9	5.8306	.02827	2773.5	5.8162	.02737
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3676.4	7.1605	.061779	3674.8	7.1449	.059849	3673.2	7.1297	.058033	3671.6	7.1150	.056321
620	3699.9	7.1870	.062569	3698.4	7.1715	.060617	3696.8	7.1563	.058780	3695.2	7.1416	.057049
630	3723.5	7.2132	.063356	3722.0	7.1977	.061382	3720.5	7.1827	.059525	3718.9	7.1680	.057774
640	3747.1	7.2392	.064140	3745.6	7.2238	.062145	3744.1	7.2087	.060267	3742.6	7.1941	.058497
650	3770.7	7.2649	.064922	3769.2	7.2495	.062905	3767.8	7.2345	.061007	3766.4	7.2200	.059217
660	3794.3	7.2904	.065702	3792.9	7.2750	.063663	3791.5	7.2601	.061745	3790.1	7.2456	.059935
670	3818.0	7.3156	.066480	3816.6	7.3003	.064419	3815.3	7.2854	.062480	3813.9	7.2709	.060651
680	3841.7	7.3406	.067255	3840.4	7.3253	.065173	3839.0	7.3105	.063213	3837.7	7.2960	.061365
690	3865.4	7.3654	.068029	3864.1	7.3501	.065925	3862.8	7.3353	.063944	3861.6	7.3209	.062077
700	3889.2	7.3899	.068801	3887.9	7.3747	.066675	3886.7	7.3599	.064674	3885.4	7.3456	.062787
710	3913.0	7.4142	.069571	3911.8	7.3991	.067423	3910.6	7.3843	.065401	3909.3	7.3700	.063495
720	3936.8	7.4384	.070339	3935.6	7.4232	.068169	3934.5	7.4085	.066127	3933.3	7.3942	.064202
730	3960.7	7.4623	.071105	3959.5	7.4472	.068914	3958.4	7.4325	.066851	3957.2	7.4182	.064907
740	3984.6	7.4860	.071870	3983.5	7.4709	.069657	3982.4	7.4563	.067574	3981.2	7.4420	.065610
750	4008.5	7.5095	.072634	4007.4	7.4945	.070398	4006.4	7.4799	.068295	4005.3	7.4657	.066311
760	4032.5	7.5328	.073395	4031.5	7.5178	.071138	4030.4	7.5032	.069014	4029.4	7.4891	.067011
770	4056.5	7.5560	.074156	4055.5	7.5410	.071877	4054.5	7.5264	.069732	4053.5	7.5123	.067710
780	4080.6	7.5789	.074915	4079.6	7.5640	.072614	4078.6	7.5494	.070449	4077.6	7.5353	.068407
790	4104.7	7.6017	.075672	4103.7	7.5868	.073350	4102.7	7.5723	.071164	4101.8	7.5582	.069103
800	4128.8	7.6243	.076429	4127.9	7.6094	.074084	4126.9	7.5949	.071878	4126.0	7.5808	.069798

TABLE 3 WATER AND STEAM

p(MPa)	7.200			7.400			7.600			7.800		
SAT t(°C)	287.70			289.57			291.41			293.21		
SAT.LIQ	1277.6	3.1397	.0013579	1287.7	3.1571	.0013644	1297.6	3.1742	.0013710	1307.4	3.1911	.0013776
SAT.VAP	2770.9	5.8020	.02652	2768.3	5.7880	.02572	2765.5	5.7742	.02495	2762.8	5.7606	.02422
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	7.3	.0004	.0009966	7.5	.0004	.0009965	7.7	.0004	.0009964	7.9	.0004	.0009963
10	49.0	.1503	.0009969	49.2	.1503	.0009968	49.4	.1503	.0009967	49.6	.1503	.0009966
20	90.6	.2948	.0009985	90.8	.2947	.0009984	91.0	.2947	.0009983	91.2	.2946	.0009982
30	132.2	.4343	.0010011	132.4	.4342	.0010010	132.6	.4342	.0010009	132.7	.4341	.0010009
40	173.8	.5693	.0010046	174.0	.5692	.0010046	174.2	.5691	.0010045	174.3	.5691	.0010044
50	215.4	.7002	.0010089	215.6	.7001	.0010088	215.8	.7000	.0010087	216.0	.6999	.0010087
60	257.1	.8271	.0010139	257.3	.8270	.0010138	257.4	.8269	.0010137	257.6	.8268	.0010136
70	298.8	.9505	.0010195	299.0	.9504	.0010194	299.1	.9503	.0010193	299.3	.9502	.0010193
80	340.6	1.0705	.0010258	340.8	1.0704	.0010257	340.9	1.0703	.0010256	341.1	1.0701	.0010255
90	382.5	1.1874	.0010326	382.6	1.1873	.0010325	382.8	1.1871	.0010324	382.9	1.1870	.0010323
100	424.4	1.3013	.0010400	424.5	1.3012	.0010399	424.7	1.3010	.0010398	424.8	1.3009	.0010397
110	466.5	1.4126	.0010480	466.6	1.4124	.0010479	466.7	1.4122	.0010478	466.9	1.4121	.0010477
120	508.7	1.5213	.0010566	508.8	1.5211	.0010565	508.9	1.5209	.0010564	509.1	1.5208	.0010563
130	551.0	1.6277	.0010658	551.2	1.6275	.0010657	551.3	1.6273	.0010656	551.4	1.6271	.0010655
140	593.6	1.7319	.0010757	593.7	1.7317	.0010755	593.8	1.7315	.0010754	594.0	1.7313	.0010753
150	636.3	1.8342	.0010862	636.5	1.8340	.0010860	636.6	1.8338	.0010859	636.7	1.8336	.0010858
160	679.4	1.9347	.0010974	679.5	1.9345	.0010973	679.6	1.9343	.0010971	679.7	1.9340	.0010970
170	722.7	2.0336	.0011094	722.8	2.0333	.0011092	722.9	2.0331	.0011091	723.0	2.0328	.0011089
180	766.3	2.1309	.0011222	766.4	2.1307	.0011221	766.5	2.1304	.0011219	766.6	2.1301	.0011217
190	810.3	2.2270	.0011360	810.4	2.2267	.0011358	810.5	2.2264	.0011356	810.6	2.2261	.0011354
200	854.7	2.3219	.0011508	854.8	2.3216	.0011506	854.9	2.3212	.0011504	855.0	2.3209	.0011502
210	899.6	2.4158	.0011667	899.7	2.4154	.0011664	899.8	2.4151	.0011662	899.8	2.4148	.0011660
220	945.1	2.5089	.0011839	945.1	2.5085	.0011836	945.2	2.5082	.0011834	945.3	2.5078	.0011831
230	991.2	2.6014	.0012026	991.2	2.6010	.0012023	991.3	2.6006	.0012020	991.3	2.6002	.0012018
240	1038.0	2.6936	.0012230	1038.0	2.6932	.0012227	1038.1	2.6928	.0012224	1038.1	2.6923	.0012221
250	1085.8	2.7857	.0012455	1085.8	2.7853	.0012451	1085.8	2.7848	.0012448	1085.8	2.7843	.0012444
260	1134.6	2.8781	.0012704	1134.5	2.8776	.0012700	1134.5	2.8771	.0012696	1134.5	2.8766	.0012692
270	1184.7	2.9713	.0012983	1184.6	2.9707	.0012978	1184.5	2.9701	.0012973	1184.5	2.9695	.0012969
280	1236.4	3.0656	.0013301	1236.3	3.0649	.0013295	1236.2	3.0643	.0013289	1236.1	3.0636	.0013283
290	2782.5	5.8226	.026878	2770.5	5.7919	.025781	1289.9	3.1605	.0013654	1289.7	3.1597	.0013647
300	2829.5	5.9054	.028321	2819.3	5.8779	.027238	2808.8	5.8503	.026204	2798.0	5.8224	.025214

TABLE 3 WATER AND STEAM

p(MPa) =	7.200			7.400			7.600			7.800		
SAT t(°C)	287.70			289.57			291.41			293.21		
SAT.LIQ	1277.6	3.1397	.0013579	1287.7	3.1571	.0013644	1297.6	3.1742	.0013710	1307.4	3.1911	.0013776
SAT.VAP	2770.9	5.8020	.02652	2768.3	5.7880	.02572	2765.5	5.7742	.02495	2762.8	5.7606	.02422
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	2871.9	5.9786	.029630	2863.1	5.9536	.028551	2854.0	5.9285	.027522	2844.8	5.9033	.026541
320	2910.7	6.0447	.030839	2903.0	6.0214	.029757	2895.0	5.9982	.028728	2887.0	5.9751	.027747
330	2946.8	6.1051	.031970	2939.9	6.0832	.030882	2932.9	6.0615	.029847	2925.7	6.0399	.028863
340	2980.8	6.1610	.033041	2974.6	6.1402	.031943	2968.2	6.1196	.030901	2961.8	6.0992	.029909
350	3013.1	6.2132	.034063	3007.4	6.1933	.032954	3001.6	6.1737	.031901	2995.8	6.1542	.030900
360	3043.9	6.2623	.035044	3038.7	6.2432	.033922	3033.4	6.2243	.032858	3028.1	6.2056	.031847
370	3073.6	6.3088	.035991	3068.8	6.2903	.034856	3063.9	6.2721	.033780	3059.0	6.2541	.032757
380	3102.3	6.3531	.036910	3097.8	6.3351	.035761	3093.3	6.3174	.034671	3088.8	6.3000	.033636
390	3130.2	6.3955	.037804	3126.0	6.3780	.036640	3121.8	6.3607	.035537	3117.6	6.3438	.034489
400	3157.4	6.4362	.038676	3153.5	6.4191	.037497	3149.6	6.4022	.036380	3145.6	6.3857	.035319
410	3184.0	6.4754	.039530	3180.3	6.4586	.038336	3176.6	6.4422	.037204	3172.9	6.4260	.036130
420	3210.1	6.5133	.040368	3206.6	6.4969	.039158	3203.2	6.4807	.038011	3199.7	6.4649	.036923
430	3235.8	6.5501	.041191	3232.5	6.5340	.039966	3229.2	6.5181	.038804	3225.9	6.5025	.037701
440	3261.1	6.5859	.042002	3258.0	6.5700	.040760	3254.9	6.5543	.039583	3251.8	6.5390	.038466
450	3286.1	6.6208	.042802	3283.2	6.6050	.041544	3280.3	6.5896	.040351	3277.3	6.5745	.039220
460	3310.9	6.6548	.043591	3308.1	6.6393	.042317	3305.3	6.6240	.041109	3302.5	6.6091	.039963
470	3335.5	6.6881	.044372	3332.8	6.6727	.043081	3330.1	6.6577	.041857	3327.4	6.6429	.040696
480	3359.9	6.7207	.045144	3357.3	6.7054	.043837	3354.7	6.6906	.042597	3352.2	6.6760	.041422
490	3384.1	6.7526	.045910	3381.7	6.7376	.044585	3379.2	6.7228	.043330	3376.7	6.7084	.042139
500	3408.2	6.7840	.046668	3405.9	6.7691	.045327	3403.5	6.7545	.044056	3401.1	6.7402	.042850
510	3432.2	6.8149	.047421	3430.0	6.8000	.046063	3427.7	6.7856	.044776	3425.4	6.7714	.043554
520	3456.2	6.8452	.048168	3454.0	6.8305	.046793	3451.8	6.8161	.045490	3449.6	6.8021	.044253
530	3480.0	6.8751	.048910	3477.9	6.8605	.047518	3475.8	6.8462	.046199	3473.7	6.8322	.044947
540	3503.8	6.9046	.049648	3501.8	6.8901	.048238	3499.8	6.8759	.046903	3497.7	6.8620	.045636
550	3527.6	6.9337	.050381	3525.7	6.9192	.048954	3523.7	6.9051	.047603	3521.7	6.8913	.046320
560	3551.4	6.9623	.051110	3549.5	6.9480	.049666	3547.6	6.9339	.048298	3545.7	6.9202	.047001
570	3575.1	6.9906	.051835	3573.2	6.9763	.050374	3571.4	6.9624	.048990	3569.6	6.9487	.047677
580	3598.8	7.0186	.052557	3597.0	7.0044	.051079	3595.2	6.9905	.049679	3593.5	6.9769	.048350
590	3622.5	7.0462	.053276	3620.8	7.0321	.051780	3619.1	7.0182	.050364	3617.3	7.0047	.049020
600	3646.2	7.0735	.053991	3644.5	7.0594	.052478	3642.9	7.0457	.051045	3641.2	7.0322	.049686

TABLE 3 WATER AND STEAM

	p(MPa) = 7.200			= 7.400			= 7.600			= 7.800		
SAT	t(°C)	287.70			289.57			291.41			293.21	
SAT.LIQ	1277.6	3.1397	.0013579	1287.7	3.1571	.0013644	1297.6	3.1742	.0013710	1307.4	3.1911	.0013776
SAT.VAP	2770.9	5.8020	.02652	2768.3	5.7880	.02572	2765.5	5.7742	.02495	2762.8	5.7606	.02422
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3669.9	7.1006	.054704	3668.3	7.0865	.053174	3666.7	7.0728	.051724	3665.1	7.0594	.050349
620	3693.7	7.1273	.055413	3692.1	7.1133	.053866	3690.5	7.0996	.052401	3688.9	7.0863	.051010
630	3717.4	7.1537	.056120	3715.9	7.1398	.054556	3714.4	7.1262	.053074	3712.8	7.1129	.051668
640	3741.2	7.1799	.056825	3739.7	7.1660	.055243	3738.2	7.1524	.053745	3736.7	7.1392	.052323
650	3764.9	7.2058	.057527	3763.5	7.1919	.055928	3762.1	7.1784	.054413	3760.6	7.1652	.052976
660	3788.7	7.2314	.058227	3787.3	7.2176	.056611	3785.9	7.2041	.055080	3784.5	7.1910	.053627
670	3812.6	7.2568	.058925	3811.2	7.2430	.057291	3809.8	7.2296	.055744	3808.5	7.2165	.054276
680	3836.4	7.2820	.059620	3835.1	7.2682	.057969	3833.8	7.2549	.056406	3832.5	7.2418	.054922
690	3860.3	7.3069	.060314	3859.0	7.2932	.058646	3857.7	7.2799	.057066	3856.4	7.2668	.055566
700	3884.2	7.3316	.061006	3883.0	7.3179	.059320	3881.7	7.3046	.057724	3880.5	7.2916	.056209
710	3908.1	7.3560	.061695	3906.9	7.3424	.059993	3905.7	7.3292	.058380	3904.5	7.3162	.056849
720	3932.1	7.3803	.062384	3930.9	7.3667	.060664	3929.8	7.3535	.059034	3928.6	7.3406	.057488
730	3956.1	7.4043	.063070	3955.0	7.3908	.061333	3953.8	7.3776	.059687	3952.7	7.3647	.058125
740	3980.1	7.4282	.063755	3979.0	7.4147	.062000	3977.9	7.4015	.060338	3976.8	7.3887	.058761
750	4004.2	7.4518	.064438	4003.1	7.4383	.062666	4002.1	7.4252	.060987	4001.0	7.4124	.059395
760	4028.3	7.4753	.065120	4027.3	7.4618	.063331	4026.2	7.4487	.061635	4025.2	7.4359	.060027
770	4052.4	7.4985	.065800	4051.4	7.4851	.063993	4050.4	7.4720	.062282	4049.4	7.4593	.060658
780	4076.6	7.5216	.066479	4075.6	7.5082	.064655	4074.6	7.4951	.062927	4073.6	7.4824	.061288
790	4100.8	7.5445	.067156	4099.9	7.5311	.065315	4098.9	7.5181	.063571	4097.9	7.5054	.061916
800	4125.1	7.5671	.067833	4124.1	7.5538	.065974	4123.2	7.5408	.064214	4122.3	7.5281	.062543

TABLE 3 WATER AND STEAM

p(MPa)	= 8.000			= 8.200			= 8.400			= 8.600		
SAT t(°C)	294.97			296.70			298.39			300.06		
SAT.LIQ	1317.1	3.2076	.0013842	1326.6	3.2239	.0013909	1336.1	3.2399	.0013976	1345.4	3.2557	.0014043
SAT.VAP	2759.9	5.7471	.02353	2757.0	5.7338	.02286	2754.0	5.7207	.02223	2750.9	5.7076	.02163
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	8.1	.0004	.0009962	8.3	.0004	.0009961	8.5	.0004	.0009961	8.7	.0004	.0009960
10	49.8	.1503	.0009965	50.0	.1502	.0009964	50.2	.1502	.0009963	50.4	.1502	.0009962
20	91.4	.2946	.0009981	91.5	.2946	.0009980	91.7	.2945	.0009979	91.9	.2945	.0009979
30	132.9	.4340	.0010008	133.1	.4340	.0010007	133.3	.4339	.0010006	133.5	.4339	.0010005
40	174.5	.5690	.0010043	174.7	.5689	.0010042	174.9	.5688	.0010041	175.0	.5688	.0010040
50	216.1	.6998	.0010086	216.3	.6997	.0010085	216.5	.6996	.0010084	216.6	.6995	.0010083
60	257.8	.8267	.0010135	257.9	.8266	.0010135	258.1	.8265	.0010134	258.3	.8264	.0010133
70	299.5	.9500	.0010192	299.6	.9499	.0010191	299.8	.9498	.0010190	300.0	.9497	.0010189
80	341.2	1.0700	.0010254	341.4	1.0699	.0010253	341.6	1.0697	.0010252	341.7	1.0696	.0010251
90	383.1	1.1868	.0010322	383.2	1.1867	.0010321	383.4	1.1865	.0010320	383.5	1.1864	.0010319
100	425.0	1.3007	.0010396	425.1	1.3006	.0010395	425.3	1.3004	.0010394	425.4	1.3003	.0010393
110	467.0	1.4119	.0010476	467.2	1.4117	.0010475	467.3	1.4116	.0010474	467.5	1.4114	.0010473
120	509.2	1.5206	.0010562	509.4	1.5204	.0010561	509.5	1.5202	.0010560	509.6	1.5200	.0010558
130	551.6	1.6269	.0010654	551.7	1.6267	.0010652	551.8	1.6265	.0010651	552.0	1.6264	.0010650
140	594.1	1.7311	.0010752	594.2	1.7309	.0010750	594.4	1.7307	.0010749	594.5	1.7305	.0010748
150	636.8	1.8334	.0010856	637.0	1.8332	.0010855	637.1	1.8329	.0010854	637.2	1.8327	.0010852
160	679.8	1.9338	.0010968	680.0	1.9336	.0010967	680.1	1.9333	.0010965	680.2	1.9331	.0010964
170	723.1	2.0326	.0011088	723.2	2.0323	.0011086	723.3	2.0321	.0011085	723.5	2.0318	.0011083
180	766.7	2.1299	.0011216	766.8	2.1296	.0011214	766.9	2.1293	.0011212	767.0	2.1291	.0011211
190	810.7	2.2258	.0011353	810.8	2.2256	.0011351	810.9	2.2253	.0011349	811.0	2.2250	.0011347
200	855.1	2.3206	.0011500	855.1	2.3203	.0011498	855.2	2.3200	.0011496	855.3	2.3197	.0011494
210	899.9	2.4144	.0011658	900.0	2.4141	.0011656	900.1	2.4138	.0011654	900.1	2.4135	.0011651
220	945.3	2.5075	.0011829	945.4	2.5071	.0011827	945.4	2.5067	.0011824	945.5	2.5064	.0011822
230	991.3	2.5999	.0012015	991.4	2.5995	.0012012	991.4	2.5991	.0012009	991.5	2.5987	.0012007
240	1038.1	2.6919	.0012218	1038.1	2.6915	.0012215	1038.2	2.6911	.0012212	1038.2	2.6906	.0012209
250	1085.8	2.7839	.0012441	1085.8	2.7834	.0012437	1085.8	2.7829	.0012434	1085.8	2.7825	.0012430
260	1134.5	2.8761	.0012687	1134.4	2.8755	.0012683	1134.4	2.8750	.0012679	1134.4	2.8745	.0012675
270	1184.4	2.9689	.0012964	1184.4	2.9683	.0012959	1184.3	2.9677	.0012954	1184.2	2.9671	.0012950
280	1236.0	3.0629	.0013277	1235.9	3.0623	.0013272	1235.8	3.0616	.0013266	1235.7	3.0609	.0013260
290	1289.5	3.1589	.0013639	1289.4	3.1581	.0013632	1289.2	3.1573	.0013625	1289.0	3.1566	.0013618
300	2786.8	5.7942	.024264	2775.2	5.7656	.023350	2763.1	5.7366	.022469	1345.0	3.2551	.0014040

TABLE 3 WATER AND STEAM

p(MPa)	= 8.000			= 8.200			= 8.400			= 8.600		
SAT t(°C)	294.97			296.70			298.39			300.06		
SAT.LIQ	1317.1	3.2076	.0013842	1326.6	3.2239	.0013909	1336.1	3.2399	.0013976	1345.4	3.2557	.0014043
SAT.VAP	2759.9	5.7471	.02353	2757.0	5.7338	.02286	2754.0	5.7207	.02223	2750.9	5.7076	.02163
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	2835.2	5.8780	.025602	2825.4	5.8526	.024702	2815.4	5.8270	.023838	2805.0	5.8012	.023007
320	2878.7	5.9519	.026811	2870.2	5.9288	.025916	2861.6	5.9056	.025058	2852.7	5.8823	.024236
330	2918.4	6.0183	.027924	2911.0	5.9969	.027028	2903.4	5.9755	.026171	2895.6	5.9541	.025350
340	2955.3	6.0790	.028965	2948.6	6.0588	.028064	2941.9	6.0388	.027203	2935.0	6.0189	.026380
350	2989.9	6.1349	.029948	2983.9	6.1159	.029040	2977.8	6.0969	.028173	2971.6	6.0781	.027345
360	3022.7	6.1872	.030885	3017.2	6.1689	.029968	3011.7	6.1509	.029094	3006.1	6.1330	.028258
370	3054.0	6.2363	.031784	3049.0	6.2188	.030858	3043.9	6.2014	.029974	3038.8	6.1843	.029130
380	3084.2	6.2828	.032652	3079.5	6.2659	.031715	3074.8	6.2491	.030821	3070.1	6.2326	.029968
390	3113.3	6.3271	.033493	3109.0	6.3106	.032544	3104.7	6.2944	.031640	3100.3	6.2784	.030777
400	3141.6	6.3694	.034310	3137.6	6.3534	.033350	3133.5	6.3376	.032435	3129.4	6.3220	.031561
410	3169.2	6.4101	.035108	3165.4	6.3945	.034136	3161.6	6.3791	.033209	3157.8	6.3639	.032325
420	3196.2	6.4493	.035888	3192.6	6.4340	.034904	3189.1	6.4189	.033965	3185.5	6.4041	.033070
430	3222.6	6.4872	.036653	3219.3	6.4722	.035656	3215.9	6.4574	.034706	3212.5	6.4429	.033799
440	3248.7	6.5240	.037405	3245.5	6.5092	.036395	3242.3	6.4947	.035432	3239.1	6.4804	.034514
450	3274.3	6.5597	.038145	3271.3	6.5452	.037121	3268.3	6.5309	.036147	3265.3	6.5168	.035217
460	3299.7	6.5945	.038874	3296.8	6.5802	.037837	3293.9	6.5661	.036850	3291.1	6.5522	.035908
470	3324.7	6.6285	.039593	3322.0	6.6143	.038544	3319.3	6.6004	.037544	3316.5	6.5868	.036590
480	3349.6	6.6617	.040304	3347.0	6.6477	.039241	3344.4	6.6340	.038229	3341.8	6.6205	.037263
490	3374.3	6.6942	.041008	3371.8	6.6804	.039931	3369.3	6.6668	.038906	3366.8	6.6534	.037928
500	3398.8	6.7262	.041704	3396.4	6.7124	.040614	3394.0	6.6990	.039576	3391.6	6.6858	.038586
510	3423.1	6.7575	.042394	3420.9	6.7439	.041291	3418.6	6.7305	.040239	3416.3	6.7175	.039237
520	3447.4	6.7883	.043079	3445.2	6.7748	.041961	3443.0	6.7616	.040897	3440.8	6.7486	.039882
530	3471.6	6.8186	.043758	3469.5	6.8052	.042627	3467.3	6.7921	.041549	3465.2	6.7792	.040522
540	3495.7	6.8484	.044432	3493.7	6.8351	.043287	3491.6	6.8221	.042197	3489.5	6.8093	.041157
550	3519.7	6.8778	.045102	3517.8	6.8646	.043943	3515.8	6.8516	.042839	3513.8	6.8390	.041787
560	3543.8	6.9068	.045768	3541.8	6.8937	.044595	3539.9	6.8808	.043478	3538.0	6.8682	.042413
570	3567.7	6.9354	.046430	3565.9	6.9223	.045243	3564.0	6.9095	.044113	3562.2	6.8970	.043035
580	3591.7	6.9636	.047088	3589.9	6.9506	.045887	3588.1	6.9379	.044744	3586.3	6.9255	.043653
590	3615.6	6.9915	.047743	3613.9	6.9786	.046528	3612.1	6.9659	.045371	3610.4	6.9535	.044268
600	3639.5	7.0191	.048394	3637.9	7.0062	.047166	3636.2	6.9936	.045996	3634.5	6.9813	.044880

TABLE 3 WATER AND STEAM

p(MPa) =	8.000			= 8.200			= 8.400			= 8.600		
SAT t(°C)	294.97			296.70			298.39			300.06		
SAT.LIQ	1317.1	3.2076	.0013842	1326.6	3.2239	.0013909	1336.1	3.2399	.0013976	1345.4	3.2557	.0014043
SAT.VAP	2759.9	5.7471	.02353	2757.0	5.7338	.02286	2754.0	5.7207	.02223	2750.9	5.7076	.02163
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3663.4	7.0463	.049043	3661.8	7.0335	.047801	3660.2	7.0210	.046617	3658.6	7.0087	.045489
620	3687.4	7.0732	.049689	3685.8	7.0605	.048432	3684.2	7.0480	.047236	3682.6	7.0358	.046095
630	3711.3	7.0999	.050332	3709.8	7.0872	.049062	3708.2	7.0748	.047852	3706.7	7.0626	.046698
640	3735.2	7.1262	.050973	3733.7	7.1136	.049688	3732.3	7.1012	.048465	3730.8	7.0891	.047298
650	3759.2	7.1523	.051611	3757.7	7.1397	.050313	3756.3	7.1274	.049076	3754.9	7.1153	.047897
660	3783.1	7.1781	.052247	3781.8	7.1656	.050934	3780.4	7.1533	.049684	3779.0	7.1413	.048492
670	3807.1	7.2037	.052881	3805.8	7.1912	.051554	3804.4	7.1790	.050291	3803.1	7.1670	.049086
680	3831.1	7.2290	.053512	3829.8	7.2166	.052172	3828.5	7.2044	.050895	3827.2	7.1924	.049678
690	3855.2	7.2541	.054142	3853.9	7.2417	.052787	3852.6	7.2295	.051497	3851.3	7.2176	.050267
700	3879.2	7.2790	.054770	3878.0	7.2666	.053401	3876.7	7.2544	.052097	3875.5	7.2426	.050854
710	3903.3	7.3036	.055396	3902.1	7.2912	.054013	3900.9	7.2791	.052696	3899.7	7.2673	.051440
720	3927.4	7.3280	.056020	3926.2	7.3156	.054623	3925.1	7.3036	.053292	3923.9	7.2918	.052024
730	3951.5	7.3521	.056642	3950.4	7.3399	.055231	3949.3	7.3278	.053887	3948.1	7.3161	.052606
740	3975.7	7.3761	.057263	3974.6	7.3639	.055838	3973.5	7.3519	.054481	3972.4	7.3402	.053187
750	3999.9	7.3999	.057882	3998.8	7.3876	.056443	3997.7	7.3757	.055072	3996.7	7.3640	.053766
760	4024.1	7.4234	.058500	4023.1	7.4112	.057047	4022.0	7.3993	.055663	4021.0	7.3877	.054343
770	4048.4	7.4468	.059116	4047.4	7.4346	.057649	4046.3	7.4227	.056251	4045.3	7.4111	.054919
780	4072.7	7.4700	.059731	4071.7	7.4578	.058249	4070.7	7.4460	.056839	4069.7	7.4344	.055494
790	4097.0	7.4930	.060344	4096.0	7.4808	.058849	4095.1	7.4690	.057425	4094.1	7.4574	.056067
800	4121.3	7.5158	.060956	4120.4	7.5037	.059447	4119.5	7.4918	.058009	4118.5	7.4803	.056639

TABLE 3 WATER AND STEAM

p(MPa)	= 8.800			= 9.000			= 9.200			= 9.400		
SAT t(°C)	301.70			303.31			304.89			306.44		
SAT.LIQ	1354.6	3.2713	.0014111	1363.7	3.2867	.0014179	1372.8	3.3018	.0014247	1381.7	3.3168	.0014316
SAT.VAP	2747.8	5.6948	.02105	2744.6	5.6820	.02050	2741.4	5.6694	.01996	2738.0	5.6568	.01945
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	8.9	.0005	.0009959	9.1	.0005	.0009958	9.3	.0005	.0009957	9.5	.0005	.0009956
10	50.5	.1502	.0009961	50.7	.1502	.0009960	50.9	.1501	.0009960	51.1	.1501	.0009959
20	92.1	.2944	.0009978	92.3	.2944	.0009977	92.5	.2943	.0009976	92.7	.2943	.0009975
30	133.7	.4338	.0010004	133.8	.4337	.0010003	134.0	.4337	.0010002	134.2	.4336	.0010002
40	175.2	.5687	.0010039	175.4	.5686	.0010039	175.6	.5685	.0010038	175.7	.5684	.0010037
50	216.8	.6994	.0010082	217.0	.6993	.0010081	217.2	.6992	.0010080	217.3	.6991	.0010080
60	258.4	.8263	.0010132	258.6	.8262	.0010131	258.8	.8261	.0010130	258.9	.8260	.0010129
70	300.1	.9496	.0010188	300.3	.9495	.0010187	300.5	.9493	.0010186	300.6	.9492	.0010185
80	341.9	1.0695	.0010250	342.0	1.0694	.0010249	342.2	1.0692	.0010248	342.3	1.0691	.0010247
90	383.7	1.1863	.0010318	383.8	1.1861	.0010317	384.0	1.1860	.0010316	384.2	1.1858	.0010315
100	425.6	1.3001	.0010392	425.8	1.3000	.0010391	425.9	1.2998	.0010390	426.1	1.2996	.0010389
110	467.6	1.4112	.0010472	467.8	1.4111	.0010471	467.9	1.4109	.0010470	468.1	1.4107	.0010469
120	509.8	1.5199	.0010557	509.9	1.5197	.0010556	510.1	1.5195	.0010555	510.2	1.5193	.0010554
130	552.1	1.6262	.0010649	552.2	1.6260	.0010648	552.4	1.6258	.0010647	552.5	1.6256	.0010645
140	594.6	1.7303	.0010747	594.7	1.7301	.0010745	594.9	1.7299	.0010744	595.0	1.7297	.0010743
150	637.3	1.8325	.0010851	637.5	1.8323	.0010850	637.6	1.8321	.0010849	637.7	1.8319	.0010847
160	680.3	1.9329	.0010963	680.4	1.9326	.0010961	680.6	1.9324	.0010960	680.7	1.9322	.0010958
170	723.6	2.0316	.0011082	723.7	2.0313	.0011080	723.8	2.0311	.0011079	723.9	2.0309	.0011077
180	767.1	2.1288	.0011209	767.2	2.1286	.0011207	767.3	2.1283	.0011206	767.4	2.1280	.0011204
190	811.1	2.2247	.0011345	811.2	2.2244	.0011344	811.3	2.2241	.0011342	811.4	2.2239	.0011340
200	855.4	2.3194	.0011492	855.5	2.3191	.0011490	855.6	2.3188	.0011488	855.7	2.3185	.0011486
210	900.2	2.4131	.0011649	900.3	2.4128	.0011647	900.4	2.4125	.0011645	900.4	2.4122	.0011643
220	945.6	2.5060	.0011819	945.6	2.5057	.0011817	945.7	2.5053	.0011815	945.7	2.5050	.0011812
230	991.5	2.5983	.0012004	991.6	2.5979	.0012001	991.6	2.5975	.0011999	991.7	2.5972	.0011996
240	1038.2	2.6902	.0012206	1038.3	2.6898	.0012203	1038.3	2.6894	.0012200	1038.3	2.6890	.0012197
250	1085.8	2.7820	.0012427	1085.8	2.7815	.0012423	1085.8	2.7811	.0012420	1085.8	2.7806	.0012416
260	1134.4	2.8740	.0012671	1134.3	2.8735	.0012667	1134.3	2.8729	.0012663	1134.3	2.8724	.0012659
270	1184.2	2.9666	.0012945	1184.1	2.9660	.0012940	1184.1	2.9654	.0012935	1184.0	2.9648	.0012931
280	1235.6	3.0603	.0013255	1235.5	3.0596	.0013249	1235.4	3.0589	.0013243	1235.3	3.0583	.0013238
290	1288.9	3.1558	.0013611	1288.7	3.1550	.0013604	1288.6	3.1543	.0013597	1288.4	3.1535	.0013590
300	1344.8	3.2542	.0014031	1344.6	3.2533	.0014022	1344.3	3.2524	.0014013	1344.1	3.2515	.0014005

TABLE 3 WATER AND STEAM

p(MPa) =	8.800			= 9.000			= 9.200			= 9.400		
SAT t(°C)	301.70			303.31			304.89			306.44		
SAT.LIQ	1354.6	3.2713	.0014111	1363.7	3.2867	.0014179	1372.8	3.3018	.0014247	1381.7	3.3168	.0014316
SAT.VAP	2747.8	5.6948	.02105	2744.6	5.6820	.02050	2741.4	5.6694	.01996	2738.0	5.6568	.01945
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	2794.3	5.7751	.022207	2783.2	5.7486	.021434	2771.7	5.7217	.020686	2759.9	5.6944	.019961
320	2843.6	5.8590	.023446	2834.3	5.8355	.022685	2824.7	5.8118	.021952	2814.8	5.7879	.021245
330	2887.8	5.9328	.024563	2879.7	5.9114	.023807	2871.4	5.8899	.023081	2863.0	5.8684	.022381
340	2928.0	5.9990	.025592	2920.9	5.9792	.024836	2913.7	5.9594	.024110	2906.3	5.9397	.023412
350	2965.4	6.0594	.026552	2959.0	6.0408	.025792	2952.6	6.0223	.025064	2946.0	6.0039	.024364
360	3000.4	6.1152	.027459	2994.7	6.0976	.026694	2988.9	6.0801	.025961	2983.0	6.0627	.025257
370	3033.6	6.1673	.028323	3028.4	6.1504	.027551	3023.1	6.1337	.026812	3017.7	6.1172	.026102
380	3065.3	6.2162	.029153	3060.5	6.2000	.028372	3055.7	6.1840	.027625	3050.7	6.1681	.026909
390	3095.8	6.2626	.029952	3091.4	6.2469	.029163	3086.9	6.2314	.028408	3082.3	6.2161	.027684
400	3125.3	6.3067	.030727	3121.2	6.2915	.029929	3117.0	6.2765	.029165	3112.8	6.2617	.028433
410	3154.0	6.3489	.031480	3150.1	6.3341	.030673	3146.2	6.3195	.029900	3142.2	6.3051	.029159
420	3181.9	6.3894	.032215	3178.2	6.3750	.031398	3174.6	6.3608	.030615	3170.9	6.3467	.029865
430	3209.1	6.4285	.032934	3205.7	6.4144	.032106	3202.3	6.4005	.031314	3198.8	6.3868	.030555
440	3235.9	6.4663	.033638	3232.7	6.4525	.032800	3229.4	6.4388	.031998	3226.2	6.4254	.031229
450	3262.2	6.5030	.034329	3259.2	6.4894	.033480	3256.1	6.4760	.032668	3253.0	6.4628	.031891
460	3288.2	6.5386	.035009	3285.3	6.5252	.034150	3282.4	6.5120	.033328	3279.4	6.4991	.032540
470	3313.8	6.5733	.035680	3311.0	6.5601	.034809	3308.3	6.5471	.033977	3305.5	6.5343	.033179
480	3339.1	6.6072	.036341	3336.5	6.5942	.035460	3333.9	6.5814	.034617	3331.2	6.5688	.033809
490	3364.3	6.6403	.036994	3361.7	6.6275	.036102	3359.2	6.6148	.035248	3356.7	6.6023	.034431
500	3389.2	6.6728	.037640	3386.8	6.6600	.036737	3384.4	6.6475	.035872	3381.9	6.6352	.035045
510	3413.9	6.7046	.038280	3411.6	6.6920	.037365	3409.3	6.6796	.036490	3407.0	6.6674	.035652
520	3438.6	6.7358	.038913	3436.3	6.7234	.037987	3434.1	6.7111	.037101	3431.9	6.6990	.036253
530	3463.1	6.7666	.039541	3460.9	6.7542	.038604	3458.8	6.7420	.037707	3456.6	6.7300	.036849
540	3487.5	6.7968	.040164	3485.4	6.7845	.039215	3483.4	6.7724	.038308	3481.3	6.7605	.037439
550	3511.8	6.8265	.040782	3509.8	6.8143	.039822	3507.8	6.8023	.038904	3505.9	6.7906	.038024
560	3536.1	6.8558	.041396	3534.2	6.8437	.040425	3532.3	6.8318	.039495	3530.3	6.8201	.038606
570	3560.3	6.8847	.042006	3558.5	6.8727	.041023	3556.6	6.8609	.040083	3554.8	6.8493	.039183
580	3584.5	6.9133	.042613	3582.7	6.9013	.041618	3580.9	6.8895	.040667	3579.1	6.8780	.039756
590	3608.7	6.9414	.043216	3606.9	6.9295	.042209	3605.2	6.9178	.041247	3603.5	6.9063	.040326
600	3632.8	6.9692	.043815	3631.1	6.9574	.042798	3629.5	6.9457	.041824	3627.8	6.9343	.040892

TABLE 3 WATER AND STEAM

p(MPa)	= 8.800			= 9.000			= 9.200			= 9.400		
SAT. t(°C)	301.70			303.31			304.89			306.44		
SAT.LIQ	1354.6	3.2713	.0014111	1363.7	3.2867	.0014179	1372.8	3.3018	.0014247	1381.7	3.3168	.0014316
SAT.VAP	2747.8	5.6948	.02105	2744.6	5.6820	.02050	2741.4	5.6694	.01996	2738.0	5.6568	.01945
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3656.9	6.9967	.044412	3655.3	6.9849	.043383	3653.7	6.9733	.042398	3652.0	6.9620	.041456
620	3681.1	7.0238	.045006	3679.5	7.0121	.043965	3677.9	7.0006	.042969	3676.3	6.9893	.042016
630	3705.2	7.0507	.045597	3703.6	7.0390	.044544	3702.1	7.0276	.043538	3700.6	7.0163	.042574
640	3729.3	7.0772	.046185	3727.8	7.0656	.045121	3726.3	7.0542	.044103	3724.8	7.0430	.043129
650	3753.4	7.1035	.046771	3752.0	7.0919	.045695	3750.5	7.0806	.044667	3749.1	7.0695	.043682
660	3777.6	7.1295	.047355	3776.1	7.1180	.046268	3774.7	7.1067	.045228	3773.3	7.0956	.044232
670	3801.7	7.1553	.047936	3800.3	7.1438	.046837	3799.0	7.1325	.045786	3797.6	7.1215	.044780
680	3825.9	7.1807	.048515	3824.5	7.1693	.047405	3823.2	7.1581	.046343	3821.9	7.1471	.045326
690	3850.0	7.2060	.049093	3848.8	7.1946	.047971	3847.5	7.1834	.046897	3846.2	7.1724	.045870
700	3874.2	7.2310	.049668	3873.0	7.2196	.048534	3871.7	7.2085	.047450	3870.5	7.1975	.046412
710	3898.5	7.2557	.050242	3897.2	7.2444	.049096	3896.0	7.2333	.048001	3894.8	7.2224	.046952
720	3922.7	7.2803	.050813	3921.5	7.2690	.049656	3920.3	7.2579	.048550	3919.2	7.2470	.047490
730	3947.0	7.3046	.051383	3945.8	7.2933	.050215	3944.7	7.2823	.049097	3943.5	7.2715	.048027
740	3971.3	7.3287	.051952	3970.2	7.3174	.050771	3969.0	7.3064	.049642	3967.9	7.2957	.048562
750	3995.6	7.3526	.052518	3994.5	7.3414	.051326	3993.4	7.3304	.050186	3992.3	7.3196	.049095
760	4019.9	7.3762	.053084	4018.9	7.3651	.051880	4017.8	7.3541	.050729	4016.8	7.3434	.049627
770	4044.3	7.3997	.053647	4043.3	7.3886	.052432	4042.3	7.3777	.051270	4041.2	7.3670	.050157
780	4068.7	7.4230	.054210	4067.7	7.4119	.052983	4066.7	7.4010	.051810	4065.7	7.3903	.050686
790	4093.1	7.4461	.054771	4092.2	7.4350	.053532	4091.2	7.4241	.052348	4090.3	7.4135	.051214
800	4117.6	7.4690	.055331	4116.7	7.4579	.054080	4115.7	7.4471	.052885	4114.8	7.4365	.051740

TABLE 3 WATER AND STEAM

p(MPa)	= 9.600			= 9.800			= 10.000			= 10.500		
SAT t(°C)	307.97			309.48			310.96			314.57		
SAT.LIQ	1390.6	3.3315	.0014385	1399.3	3.3461	.0014455	1408.0	3.3605	.0014526	1429.5	3.3959	.0014704
SAT.VAP	2734.7	5.6444	.01897	2731.2	5.6321	.01849	2727.7	5.6198	.01804	2718.7	5.5895	.01698
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	9.7	.0005	.0009955	9.9	.0005	.0009954	10.1	.0005	.0009953	10.6	.0005	.0009950
10	51.3	.1501	.0009958	51.5	.1501	.0009957	51.7	.1501	.0009956	52.2	.1500	.0009954
20	92.9	.2943	.0009974	93.0	.2942	.0009973	93.2	.2942	.0009972	93.7	.2941	.0009970
30	134.4	.4335	.0010001	134.6	.4335	.0010000	134.7	.4334	.0009999	135.2	.4333	.0009997
40	175.9	.5684	.0010036	176.1	.5683	.0010035	176.3	.5682	.0010034	176.7	.5680	.0010032
50	217.5	.6991	.0010079	217.7	.6990	.0010078	217.8	.6989	.0010077	218.3	.6986	.0010075
60	259.1	.8259	.0010128	259.3	.8258	.0010127	259.4	.8257	.0010127	259.9	.8254	.0010124
70	300.8	.9491	.0010184	300.9	.9490	.0010183	301.1	.9489	.0010183	301.5	.9486	.0010180
80	342.5	1.0690	.0010246	342.7	1.0688	.0010245	342.8	1.0687	.0010245	343.2	1.0684	.0010242
90	384.3	1.1857	.0010314	384.5	1.1855	.0010313	384.6	1.1854	.0010312	385.0	1.1851	.0010310
100	426.2	1.2995	.0010388	426.4	1.2993	.0010387	426.5	1.2992	.0010386	426.9	1.2988	.0010384
110	468.2	1.4106	.0010468	468.4	1.4104	.0010467	468.5	1.4103	.0010465	468.9	1.4098	.0010463
120	510.4	1.5192	.0010553	510.5	1.5190	.0010552	510.6	1.5188	.0010551	511.0	1.5184	.0010548
130	552.7	1.6254	.0010644	552.8	1.6252	.0010643	552.9	1.6250	.0010642	553.3	1.6246	.0010639
140	595.1	1.7295	.0010742	595.3	1.7293	.0010740	595.4	1.7291	.0010739	595.7	1.7286	.0010736
150	637.8	1.8316	.0010846	638.0	1.8314	.0010845	638.1	1.8312	.0010843	638.4	1.8307	.0010840
160	680.8	1.9320	.0010957	680.9	1.9317	.0010956	681.0	1.9315	.0010954	681.3	1.9309	.0010951
170	724.0	2.0306	.0011076	724.1	2.0304	.0011074	724.2	2.0301	.0011073	724.5	2.0295	.0011069
180	767.6	2.1278	.0011202	767.7	2.1275	.0011201	767.8	2.1272	.0011199	768.0	2.1266	.0011195
190	811.5	2.2236	.0011338	811.5	2.2233	.0011336	811.6	2.2230	.0011335	811.9	2.2223	.0011330
200	855.8	2.3182	.0011484	855.8	2.3179	.0011482	855.9	2.3176	.0011480	856.1	2.3169	.0011475
210	900.5	2.4118	.0011641	900.6	2.4115	.0011639	900.7	2.4112	.0011636	900.9	2.4104	.0011631
220	945.8	2.5046	.0011810	945.9	2.5043	.0011808	945.9	2.5039	.0011805	946.1	2.5030	.0011799
230	991.7	2.5968	.0011993	991.8	2.5964	.0011991	991.8	2.5960	.0011988	991.9	2.5951	.0011982
240	1038.3	2.6885	.0012194	1038.4	2.6881	.0012191	1038.4	2.6877	.0012188	1038.5	2.6867	.0012180
250	1085.8	2.7801	.0012413	1085.8	2.7797	.0012410	1085.8	2.7792	.0012406	1085.8	2.7781	.0012398
260	1134.3	2.8719	.0012655	1134.3	2.8714	.0012652	1134.2	2.8709	.0012648	1134.2	2.8696	.0012638
270	1184.0	2.9643	.0012926	1183.9	2.9637	.0012922	1183.9	2.9631	.0012917	1183.7	2.9617	.0012905
280	1235.2	3.0576	.0013232	1235.1	3.0570	.0013227	1235.0	3.0563	.0013221	1234.7	3.0547	.0013207
290	1288.2	3.1527	.0013583	1288.1	3.1520	.0013577	1287.9	3.1512	.0013570	1287.6	3.1494	.0013553
300	1343.8	3.2506	.0013996	1343.6	3.2497	.0013987	1343.4	3.2488	.0013979	1342.8	3.2466	.0013957

TABLE 3 WATER AND STEAM

p(MPa)	= 9.600			= 9.800			= 10.000			= 10.500		
SAT t(°C)	307.97			309.48			310.96			314.57		
SAT.LIQ	1390.6	3.3315	.0014385	1399.3	3.3461	.0014455	1408.0	3.3605	.0014526	1429.5	3.3959	.0014704
SAT.VAP	2734.7	5.6444	.01897	2731.2	5.6321	.01849	2727.7	5.6198	.01804	2718.7	5.5895	.01698
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	2747.5	5.6665	.019257	2734.7	5.6379	.018570	1402.2	3.3505	.0014472	1401.3	3.3478	.0014444
320	2804.7	5.7637	.020561	2794.3	5.7393	.019899	2783.5	5.7145	.019256	2754.9	5.6508	.017726
330	2854.4	5.8468	.021706	2845.6	5.8251	.021055	2836.5	5.8032	.020425	2812.8	5.7476	.018935
340	2898.8	5.9199	.022740	2891.2	5.9001	.022093	2883.4	5.8803	.021468	2863.1	5.8303	.019997
350	2939.4	5.9855	.023692	2932.6	5.9672	.023044	2925.8	5.9489	.022421	2908.1	5.9031	.020956
360	2977.0	6.0454	.024581	2971.0	6.0282	.023931	2964.8	6.0110	.023305	2949.1	5.9684	.021838
370	3012.3	6.1007	.025421	3006.8	6.0844	.024766	3001.3	6.0682	.024137	2987.1	6.0280	.022662
380	3045.8	6.1524	.026221	3040.8	6.1368	.025561	3035.7	6.1213	.024926	3022.8	6.0831	.023440
390	3077.8	6.2010	.026990	3073.1	6.1860	.026322	3068.5	6.1711	.025681	3056.6	6.1345	.024182
400	3108.5	6.2470	.027731	3104.2	6.2325	.027056	3099.9	6.2182	.026408	3089.0	6.1829	.024893
410	3138.3	6.2909	.028448	3134.3	6.2768	.027766	3130.3	6.2629	.027111	3120.1	6.2287	.025580
420	3167.2	6.3329	.029146	3163.4	6.3192	.028456	3159.7	6.3057	.027793	3150.2	6.2725	.026245
430	3195.3	6.3732	.029827	3191.8	6.3599	.029129	3188.3	6.3467	.028458	3179.4	6.3143	.026891
440	3222.9	6.4121	.030493	3219.6	6.3990	.029786	3216.2	6.3861	.029107	3207.9	6.3545	.027521
450	3249.9	6.4498	.031145	3246.8	6.4369	.030429	3243.6	6.4243	.029742	3235.7	6.3933	.028137
460	3276.5	6.4863	.031785	3273.5	6.4737	.031061	3270.5	6.4612	.030365	3263.1	6.4309	.028741
470	3302.7	6.5218	.032415	3299.9	6.5093	.031681	3297.0	6.4971	.030977	3289.9	6.4673	.029333
480	3328.5	6.5563	.033035	3325.9	6.5441	.032293	3323.2	6.5321	.031580	3316.4	6.5027	.029915
490	3354.1	6.5901	.033647	3351.6	6.5780	.032895	3349.0	6.5661	.032174	3342.6	6.5372	.030489
500	3379.5	6.6231	.034252	3377.0	6.6112	.033491	3374.6	6.5994	.032760	3368.4	6.5708	.031054
510	3404.7	6.6554	.034849	3402.3	6.6436	.034079	3400.0	6.6320	.033339	3394.1	6.6038	.031612
520	3429.6	6.6871	.035440	3427.4	6.6755	.034660	3425.1	6.6640	.033912	3419.5	6.6360	.032164
530	3454.5	6.7183	.036026	3452.3	6.7067	.035236	3450.2	6.6953	.034479	3444.7	6.6677	.032710
540	3479.2	6.7489	.036606	3477.1	6.7374	.035807	3475.1	6.7261	.035040	3469.8	6.6987	.033250
550	3503.9	6.7790	.037182	3501.9	6.7676	.036373	3499.8	6.7564	.035597	3494.8	6.7293	.033786
560	3528.4	6.8086	.037753	3526.5	6.7974	.036935	3524.5	6.7863	.036149	3519.7	6.7593	.034317
570	3552.9	6.8379	.038320	3551.0	6.8266	.037492	3549.2	6.8156	.036697	3544.5	6.7889	.034843
580	3577.3	6.8667	.038883	3575.5	6.8555	.038046	3573.7	6.8446	.037242	3569.2	6.8180	.035366
590	3601.7	6.8951	.039443	3600.0	6.8840	.038596	3598.2	6.8731	.037783	3593.8	6.8467	.035885
600	3626.1	6.9231	.039999	3624.4	6.9121	.039142	3622.7	6.9013	.038320	3618.5	6.8751	.036401

TABLE 3 WATER AND STEAM

p(MPa)	= 9.600			= 9.800			= 10.000			= 10.500		
SAT t(°C)	307.97			309.48			310.96			314.57		
SAT.LIQ	1390.6	3.3315	.0014385	1399.3	3.3461	.0014455	1408.0	3.3605	.0014526	1429.5	3.3959	.0014704
SAT.VAP	2734.7	5.6444	.01897	2731.2	5.6321	.01849	2727.7	5.6198	.01804	2718.7	5.5895	.01698
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3650.4	6.9509	.040552	3648.8	6.9399	.039686	3647.1	6.9292	.038854	3643.0	6.9031	.036913
620	3674.7	6.9782	.041103	3673.1	6.9674	.040227	3671.6	6.9567	.039385	3667.6	6.9307	.037423
630	3699.0	7.0053	.041650	3697.5	6.9945	.040764	3696.0	6.9838	.039914	3692.1	6.9580	.037930
640	3723.3	7.0321	.042195	3721.8	7.0213	.041300	3720.4	7.0107	.040440	3716.6	6.9850	.038434
650	3747.6	7.0585	.042738	3746.2	7.0478	.041832	3744.7	7.0373	.040963	3741.1	7.0117	.038935
660	3771.9	7.0847	.043278	3770.5	7.0740	.042363	3769.1	7.0635	.041484	3765.6	7.0381	.039434
670	3796.3	7.1106	.043816	3794.9	7.1000	.042891	3793.5	7.0895	.042003	3790.1	7.0642	.039931
680	3820.6	7.1363	.044351	3819.2	7.1257	.043417	3817.9	7.1153	.042519	3814.6	7.0901	.040426
690	3844.9	7.1617	.044885	3843.6	7.1511	.043941	3842.3	7.1408	.043034	3839.1	7.1156	.040918
700	3869.3	7.1868	.045417	3868.0	7.1763	.044463	3866.8	7.1660	.043546	3863.6	7.1410	.041409
710	3893.6	7.2117	.045947	3892.4	7.2012	.044983	3891.2	7.1910	.044057	3888.2	7.1660	.041898
720	3918.0	7.2364	.046475	3916.8	7.2260	.045501	3915.6	7.2157	.044566	3912.7	7.1909	.042385
730	3942.4	7.2608	.047001	3941.3	7.2504	.046017	3940.1	7.2402	.045073	3937.3	7.2155	.042870
740	3966.8	7.2851	.047526	3965.7	7.2747	.046532	3964.6	7.2645	.045579	3961.8	7.2398	.043353
750	3991.3	7.3091	.048049	3990.2	7.2987	.047046	3989.1	7.2886	.046083	3986.4	7.2640	.043835
760	4015.7	7.3329	.048571	4014.7	7.3226	.047558	4013.6	7.3124	.046585	4011.0	7.2879	.044316
770	4040.2	7.3565	.049091	4039.2	7.3462	.048068	4038.2	7.3361	.047086	4035.6	7.3116	.044795
780	4064.7	7.3799	.049609	4063.8	7.3696	.048577	4062.8	7.3595	.047585	4060.3	7.3352	.045272
790	4089.3	7.4031	.050127	4088.3	7.3928	.049084	4087.4	7.3828	.048084	4085.0	7.3585	.045749
800	4113.9	7.4261	.050643	4112.9	7.4159	.049591	4112.0	7.4058	.048580	4109.7	7.3816	.046223

TABLE 3 WATER AND STEAM

p(MPa)	= 11.000			= 11.500			= 12.000			= 12.500		
SAT t(°C)	318.05			321.40			324.65			327.79		
SAT.LIQ	1450.6	3.4304	.0014887	1471.3	3.4641	.0015075	1491.8	3.4972	.0015268	1512.0	3.5296	.0015466
SAT.VAP	2709.3	5.5595	.01601	2699.5	5.5298	.01511	2689.2	5.5002	.01428	2678.4	5.4706	.01351
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	11.1	.0006	.0009948	11.6	.0006	.0009945	12.1	.0006	.0009943	12.6	.0006	.0009940
10	52.7	.1499	.0009951	53.2	.1499	.0009949	53.6	.1498	.0009947	54.1	.1498	.0009944
20	94.2	.2939	.0009968	94.6	.2938	.0009966	95.1	.2937	.0009963	95.6	.2936	.0009961
30	135.6	.4331	.0009995	136.1	.4329	.0009993	136.6	.4328	.0009990	137.0	.4326	.0009988
40	177.2	.5678	.0010030	177.6	.5676	.0010028	178.0	.5674	.0010026	178.5	.5672	.0010023
50	218.7	.6984	.0010073	219.1	.6982	.0010070	219.6	.6979	.0010068	220.0	.6977	.0010066
60	260.3	.8251	.0010122	260.7	.8249	.0010120	261.1	.8246	.0010118	261.5	.8243	.0010116
70	301.9	.9483	.0010178	302.3	.9480	.0010176	302.7	.9477	.0010174	303.1	.9474	.0010171
80	343.6	1.0681	.0010240	344.0	1.0677	.0010238	344.4	1.0674	.0010235	344.8	1.0671	.0010233
90	385.4	1.1847	.0010308	385.8	1.1843	.0010305	386.2	1.1840	.0010303	386.6	1.1836	.0010300
100	427.3	1.2984	.0010381	427.6	1.2980	.0010379	428.0	1.2977	.0010376	428.4	1.2973	.0010374
110	469.2	1.4094	.0010460	469.6	1.4090	.0010458	470.0	1.4086	.0010455	470.3	1.4082	.0010452
120	511.3	1.5179	.0010545	511.7	1.5175	.0010542	512.1	1.5171	.0010540	512.4	1.5166	.0010537
130	553.6	1.6241	.0010636	554.0	1.6236	.0010633	554.3	1.6232	.0010630	554.6	1.6227	.0010627
140	596.1	1.7281	.0010733	596.4	1.7276	.0010730	596.7	1.7271	.0010727	597.1	1.7266	.0010724
150	638.7	1.8301	.0010837	639.0	1.8296	.0010833	639.4	1.8291	.0010830	639.7	1.8285	.0010827
160	681.6	1.9304	.0010947	681.9	1.9298	.0010944	682.2	1.9292	.0010940	682.5	1.9286	.0010937
170	724.8	2.0289	.0011065	725.1	2.0283	.0011061	725.4	2.0277	.0011058	725.7	2.0271	.0011054
180	768.3	2.1259	.0011191	768.6	2.1253	.0011187	768.8	2.1246	.0011183	769.1	2.1240	.0011179
190	812.1	2.2216	.0011326	812.4	2.2209	.0011321	812.6	2.2202	.0011317	812.9	2.2195	.0011313
200	856.4	2.3161	.0011470	856.6	2.3154	.0011466	856.8	2.3146	.0011461	857.0	2.3139	.0011456
210	901.0	2.4096	.0011626	901.2	2.4088	.0011621	901.4	2.4080	.0011615	901.6	2.4072	.0011610
220	946.3	2.5022	.0011793	946.4	2.5013	.0011788	946.6	2.5004	.0011782	946.7	2.4996	.0011776
230	992.1	2.5941	.0011975	992.2	2.5932	.0011969	992.3	2.5922	.0011962	992.4	2.5913	.0011956
240	1038.6	2.6856	.0012173	1038.6	2.6846	.0012165	1038.7	2.6836	.0012158	1038.8	2.6825	.0012151
250	1085.9	2.7769	.0012389	1085.9	2.7758	.0012381	1085.9	2.7747	.0012373	1086.0	2.7736	.0012364
260	1134.2	2.8684	.0012628	1134.1	2.8671	.0012619	1134.1	2.8659	.0012609	1134.1	2.8646	.0012600
270	1183.6	2.9603	.0012894	1183.5	2.9589	.0012883	1183.4	2.9575	.0012872	1183.3	2.9561	.0012861
280	1234.5	3.0531	.0013194	1234.3	3.0515	.0013180	1234.1	3.0499	.0013167	1233.9	3.0484	.0013154
290	1287.2	3.1475	.0013536	1286.8	3.1457	.0013520	1286.5	3.1439	.0013504	1286.2	3.1421	.0013488
300	1342.2	3.2444	.0013936	1341.7	3.2422	.0013915	1341.2	3.2401	.0013895	1340.6	3.2380	.0013875

TABLE 3 WATER AND STEAM

p(MPa)	= 11.000			= 11.500			= 12.000			= 12.500		
SAT t(°C)	318.05			321.40			324.65			327.79		
SAT.LIQ	1450.6	3.4304	.0014887	1471.3	3.4641	.0015075	1491.8	3.4972	.0015268	1512.0	3.5296	.0015466
SAT.VAP	2709.3	5.5595	.01601	2699.5	5.5298	.01511	2689.2	5.5002	.01428	2678.4	5.4706	.01351
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1400.5	3.3451	.0014416	1399.6	3.3424	.0014389	1398.8	3.3398	.0014362	1398.1	3.3373	.0014336
320	2723.5	5.5835	.016285	1462.1	3.4486	.0014979	1460.9	3.4453	.0014941	1459.7	3.4420	.0014905
330	2787.4	5.6904	.017550	2760.0	5.6310	.016251	2730.2	5.5686	.015019	2697.2	5.5018	.013835
340	2841.7	5.7797	.018639	2819.0	5.7279	.017376	2794.7	5.6747	.016193	2768.7	5.6195	.015077
350	2889.6	5.8571	.019610	2870.1	5.8107	.018365	2849.7	5.7636	.017206	2828.0	5.7155	.016122
360	2932.8	5.9259	.020494	2915.8	5.8835	.019255	2898.1	5.8408	.018108	2879.6	5.7976	.017041
370	2972.5	5.9882	.021313	2957.4	5.9487	.020074	2941.8	5.9093	.018930	2925.7	5.8698	.017868
380	3009.6	6.0454	.022083	2996.0	6.0082	.020838	2982.0	5.9712	.019691	2967.6	5.9345	.018629
390	3044.5	6.0985	.022814	3032.1	6.0631	.021560	3019.4	6.0281	.020406	3006.4	5.9935	.019339
400	3077.8	6.1483	.023512	3066.4	6.1144	.022248	3054.8	6.0810	.021084	3042.9	6.0481	.020010
410	3109.7	6.1954	.024184	3099.2	6.1627	.022907	3088.4	6.1306	.021733	3077.5	6.0991	.020650
420	3140.5	6.2401	.024834	3130.7	6.2085	.023543	3120.7	6.1775	.022357	3110.5	6.1471	.021264
430	3170.3	6.2828	.025464	3161.1	6.2521	.024159	3151.8	6.2221	.022961	3142.3	6.1927	.021856
440	3199.4	6.3238	.026078	3190.7	6.2939	.024758	3182.0	6.2647	.023546	3173.1	6.2362	.022429
450	3227.7	6.3633	.026676	3219.6	6.3341	.025341	3211.4	6.3056	.024116	3203.0	6.2778	.022987
460	3255.5	6.4014	.027262	3247.8	6.3728	.025911	3240.0	6.3450	.024672	3232.2	6.3179	.023530
470	3282.7	6.4384	.027837	3275.5	6.4103	.026470	3268.1	6.3831	.025215	3260.7	6.3565	.024060
480	3309.6	6.4742	.028401	3302.7	6.4467	.027017	3295.7	6.4199	.025748	3288.7	6.3939	.024580
490	3336.1	6.5092	.028956	3329.5	6.4821	.027556	3322.9	6.4557	.026271	3316.2	6.4302	.025089
500	3362.2	6.5432	.029503	3356.0	6.5165	.028086	3349.6	6.4906	.026786	3343.3	6.4654	.025590
510	3388.1	6.5765	.030042	3382.1	6.5502	.028608	3376.1	6.5246	.027293	3370.0	6.4998	.026082
520	3413.8	6.6091	.030575	3408.1	6.5830	.029124	3402.3	6.5578	.027793	3396.5	6.5334	.026568
530	3439.3	6.6410	.031102	3433.8	6.6153	.029633	3428.2	6.5903	.028286	3422.7	6.5662	.027047
540	3464.6	6.6723	.031623	3459.3	6.6468	.030137	3454.0	6.6222	.028774	3448.6	6.5983	.027520
550	3489.7	6.7031	.032139	3484.7	6.6779	.030635	3479.6	6.6535	.029256	3474.4	6.6298	.027987
560	3514.8	6.7334	.032650	3509.9	6.7083	.031129	3505.0	6.6842	.029734	3500.0	6.6608	.028450
570	3539.8	6.7631	.033158	3535.0	6.7383	.031618	3530.3	6.7144	.030207	3525.5	6.6912	.028908
580	3564.6	6.7925	.033661	3560.1	6.7679	.032103	3555.5	6.7441	.030676	3550.9	6.7211	.029362
590	3589.5	6.8214	.034160	3585.0	6.7970	.032585	3580.6	6.7734	.031141	3576.2	6.7506	.029812
600	3614.2	6.8499	.034656	3610.0	6.8256	.033063	3605.7	6.8022	.031603	3601.4	6.7796	.030259

TABLE 3 WATER AND STEAM

p(MPa)	= 11.000			= 11.500			= 12.000			= 12.500		
SAT t(°C)	318.05			321.40			324.65			327.79		
SAT.LIQ	1450.6	3.4304	.0014887	1471.3	3.4641	.0015075	1491.8	3.4972	.0015268	1512.0	3.5296	.0015466
SAT.VAP	2709.3	5.5595	.01601	2699.5	5.5298	.01511	2689.2	5.5002	.01428	2678.4	5.4706	.01351
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3638.9	6.8780	.035149	3634.8	6.8539	.033538	3630.7	6.8307	.032061	3626.5	6.8082	.030702
620	3663.6	6.9058	.035639	3659.6	6.8819	.034010	3655.6	6.8588	.032516	3651.6	6.8365	.031142
630	3688.3	6.9333	.036126	3684.4	6.9095	.034478	3680.5	6.8865	.032969	3676.6	6.8643	.031579
640	3712.9	6.9604	.036610	3709.1	6.9367	.034945	3705.4	6.9139	.033418	3701.6	6.8919	.032014
650	3737.5	6.9872	.037091	3733.9	6.9636	.035408	3730.2	6.9409	.033865	3726.6	6.9190	.032446
660	3762.1	7.0137	.037571	3758.6	6.9903	.035869	3755.0	6.9677	.034310	3751.5	6.9459	.032875
670	3786.7	7.0399	.038048	3783.3	7.0166	.036328	3779.9	6.9941	.034752	3776.4	6.9725	.033302
680	3811.3	7.0659	.038522	3808.0	7.0427	.036785	3804.7	7.0203	.035192	3801.3	6.9987	.033726
690	3835.9	7.0916	.038995	3832.7	7.0684	.037239	3829.5	7.0462	.035630	3826.2	7.0247	.034149
700	3860.5	7.1170	.039466	3857.4	7.0939	.037692	3854.3	7.0718	.036066	3851.1	7.0504	.034570
710	3885.1	7.1421	.039935	3882.1	7.1192	.038142	3879.1	7.0971	.036500	3876.0	7.0759	.034988
720	3909.8	7.1671	.040402	3906.8	7.1442	.038591	3903.9	7.1222	.036932	3900.9	7.1011	.035405
730	3934.4	7.1917	.040867	3931.5	7.1690	.039038	3928.7	7.1471	.037362	3925.8	7.1260	.035820
740	3959.0	7.2162	.041331	3956.3	7.1935	.039484	3953.5	7.1717	.037791	3950.7	7.1507	.036234
750	3983.7	7.2404	.041793	3981.0	7.2178	.039928	3978.3	7.1961	.038218	3975.6	7.1752	.036645
760	4008.4	7.2644	.042253	4005.8	7.2419	.040370	4003.1	7.2203	.038644	4000.5	7.1994	.037056
770	4033.1	7.2882	.042712	4030.5	7.2658	.040811	4028.0	7.2442	.039068	4025.5	7.2234	.037464
780	4057.8	7.3118	.043170	4055.3	7.2894	.041250	4052.9	7.2679	.039490	4050.4	7.2472	.037872
790	4082.6	7.3352	.043626	4080.2	7.3129	.041688	4077.8	7.2914	.039912	4075.3	7.2708	.038278
800	4107.3	7.3584	.044081	4105.0	7.3361	.042125	4102.7	7.3147	.040332	4100.3	7.2942	.038682

TABLE 3 WATER AND STEAM

p(MPa)	= 13.000			= 13.500			= 14.000			= 14.500		
SAT t(°C)	330.83			333.78			336.64			339.42		
SAT.LIQ	1532.0	3.5616	.0015672	1551.9	3.5931	.0015885	1571.6	3.6242	.0016106	1591.3	3.6551	.0016337
SAT.VAP	2667.0	5.4408	.01280	2655.0	5.4107	.01213	2642.4	5.3803	.01150	2629.1	5.3493	.01090
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	13.1	.0007	.0009938	13.6	.0007	.0009936	14.1	.0007	.0009933	14.6	.0007	.0009931
10	54.6	.1497	.0009942	55.1	.1497	.0009940	55.6	.1496	.0009938	56.0	.1496	.0009935
20	96.0	.2935	.0009959	96.5	.2934	.0009957	97.0	.2933	.0009955	97.4	.2932	.0009952
30	137.5	.4325	.0009986	137.9	.4323	.0009984	138.4	.4322	.0009982	138.8	.4320	.0009980
40	178.9	.5670	.0010021	179.4	.5668	.0010019	179.8	.5666	.0010017	180.2	.5665	.0010015
50	220.4	.6975	.0010064	220.8	.6973	.0010062	221.3	.6970	.0010060	221.7	.6968	.0010058
60	262.0	.8241	.0010113	262.4	.8238	.0010111	262.8	.8236	.0010109	263.2	.8233	.0010107
70	303.6	.9471	.0010169	304.0	.9468	.0010167	304.4	.9465	.0010165	304.8	.9462	.0010162
80	345.2	1.0668	.0010231	345.6	1.0664	.0010228	346.0	1.0661	.0010226	346.4	1.0658	.0010224
90	386.9	1.1833	.0010298	387.3	1.1829	.0010296	387.7	1.1826	.0010293	388.1	1.1822	.0010291
100	428.8	1.2969	.0010371	429.1	1.2965	.0010369	429.5	1.2961	.0010366	429.9	1.2958	.0010364
110	470.7	1.4078	.0010450	471.1	1.4074	.0010447	471.4	1.4070	.0010445	471.8	1.4066	.0010442
120	512.8	1.5162	.0010534	513.1	1.5157	.0010531	513.5	1.5153	.0010529	513.8	1.5149	.0010526
130	555.0	1.6222	.0010624	555.3	1.6218	.0010622	555.7	1.6213	.0010619	556.0	1.6208	.0010616
140	597.4	1.7261	.0010721	597.7	1.7256	.0010718	598.0	1.7251	.0010715	598.4	1.7246	.0010712
150	640.0	1.8280	.0010824	640.3	1.8275	.0010820	640.6	1.8269	.0010817	640.9	1.8264	.0010814
160	682.8	1.9281	.0010933	683.1	1.9275	.0010930	683.4	1.9269	.0010926	683.7	1.9264	.0010923
170	725.9	2.0265	.0011050	726.2	2.0259	.0011046	726.5	2.0253	.0011043	726.8	2.0247	.0011039
180	769.4	2.1233	.0011175	769.6	2.1227	.0011171	769.9	2.1221	.0011167	770.2	2.1214	.0011163
190	813.1	2.2188	.0011308	813.4	2.2182	.0011304	813.6	2.2175	.0011300	813.8	2.2168	.0011295
200	857.2	2.3131	.0011451	857.5	2.3124	.0011447	857.7	2.3116	.0011442	857.9	2.3109	.0011437
210	901.8	2.4064	.0011605	902.0	2.4056	.0011600	902.2	2.4048	.0011595	902.4	2.4040	.0011589
220	946.9	2.4987	.0011770	947.1	2.4978	.0011765	947.2	2.4970	.0011759	947.4	2.4961	.0011753
230	992.6	2.5904	.0011949	992.7	2.5894	.0011943	992.8	2.5885	.0011937	993.0	2.5876	.0011930
240	1038.9	2.6815	.0012144	1039.0	2.6805	.0012137	1039.1	2.6795	.0012130	1039.2	2.6785	.0012122
250	1086.0	2.7724	.0012356	1086.0	2.7713	.0012348	1086.1	2.7702	.0012340	1086.1	2.7691	.0012332
260	1134.0	2.8634	.0012590	1134.0	2.8622	.0012581	1134.0	2.8610	.0012572	1134.0	2.8597	.0012562
270	1183.2	2.9547	.0012850	1183.1	2.9533	.0012839	1183.0	2.9520	.0012828	1182.9	2.9506	.0012817
280	1233.7	3.0468	.0013141	1233.5	3.0453	.0013128	1233.3	3.0438	.0013115	1233.1	3.0422	.0013103
290	1285.8	3.1403	.0013472	1285.5	3.1385	.0013456	1285.2	3.1368	.0013441	1284.9	3.1350	.0013426
300	1340.1	3.2359	.0013855	1339.7	3.2338	.0013836	1339.2	3.2318	.0013817	1338.7	3.2298	.0013798

TABLE 3 WATER AND STEAM

p(MPa)	= 13.000			= 13.500			= 14.000			= 14.500		
SAT t(°C)	330.83			333.78			336.64			339.42		
SAT.LIQ	1532.0	3.5616	.0015672	1551.9	3.5931	.0015885	1571.6	3.6242	.0016106	1591.3	3.6551	.0016337
SAT.VAP	2667.0	5.4408	.01280	2655.0	5.4107	.01213	2642.4	5.3803	.01150	2629.1	5.3493	.01090
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1397.3	3.3348	.0014310	1396.6	3.3323	.0014285	1395.9	3.3298	.0014260	1395.2	3.3274	.0014236
320	1458.5	3.4388	.0014870	1457.4	3.4357	.0014835	1456.4	3.4327	.0014801	1455.3	3.4297	.0014769
330	1526.0	3.5516	.0015600	1524.3	3.5474	.0015548	1522.6	3.5433	.0015497	1520.9	3.5394	.0015449
340	2740.6	5.5618	.014015	2709.9	5.5007	.012994	2675.7	5.4348	.011997	2635.8	5.3603	.010997
350	2805.0	5.6661	.015102	2780.5	5.6150	.014134	2754.2	5.5618	.013211	2725.4	5.5060	.012324
360	2860.2	5.7539	.016041	2839.7	5.7093	.015102	2818.1	5.6636	.014213	2795.2	5.6165	.013369
370	2908.8	5.8301	.016878	2891.3	5.7901	.015952	2873.0	5.7496	.015082	2853.8	5.7083	.014260
380	2952.7	5.8979	.017642	2937.3	5.8612	.016720	2921.4	5.8243	.015858	2904.9	5.7872	.015047
390	2993.1	5.9592	.018349	2979.3	5.9250	.017428	2965.2	5.8909	.016567	2950.7	5.8568	.015760
400	3030.7	6.0155	.019015	3018.3	5.9833	.018090	3005.6	5.9513	.017227	2992.5	5.9194	.016419
410	3066.3	6.0680	.019647	3054.9	6.0373	.018716	3043.3	6.0069	.017848	3031.4	5.9768	.017036
420	3100.2	6.1173	.020252	3089.7	6.0878	.019313	3079.0	6.0588	.018438	3068.1	6.0301	.017622
430	3132.7	6.1639	.020834	3123.0	6.1355	.019886	3113.0	6.1076	.019004	3103.0	6.0800	.018181
440	3164.1	6.2082	.021397	3155.0	6.1808	.020439	3145.8	6.1538	.019549	3136.4	6.1272	.018718
450	3194.6	6.2506	.021943	3186.0	6.2240	.020975	3177.4	6.1978	.020075	3168.6	6.1721	.019236
460	3224.2	6.2913	.022474	3216.2	6.2654	.021496	3208.1	6.2399	.020586	3199.8	6.2150	.019738
470	3253.2	6.3306	.022993	3245.6	6.3052	.022004	3237.9	6.2804	.021084	3230.2	6.2561	.020227
480	3281.6	6.3685	.023500	3274.4	6.3437	.022499	3267.1	6.3194	.021569	3259.8	6.2957	.020703
490	3309.4	6.4052	.023997	3302.6	6.3809	.022985	3295.7	6.3572	.022044	3288.8	6.3339	.021168
500	3336.8	6.4409	.024485	3330.4	6.4171	.023461	3323.8	6.3937	.022509	3317.2	6.3710	.021623
510	3363.9	6.4757	.024964	3357.7	6.4522	.023928	3351.5	6.4293	.022966	3345.2	6.4069	.022070
520	3390.6	6.5096	.025437	3384.7	6.4865	.024389	3378.8	6.4639	.023415	3372.8	6.4419	.022508
530	3417.0	6.5427	.025902	3411.4	6.5199	.024842	3405.7	6.4977	.023857	3400.0	6.4760	.022940
540	3443.3	6.5752	.026362	3437.8	6.5526	.025289	3432.4	6.5307	.024293	3426.9	6.5093	.023365
550	3469.3	6.6069	.026816	3464.1	6.5847	.025731	3458.8	6.5630	.024723	3453.6	6.5419	.023785
560	3495.1	6.6381	.027265	3490.1	6.6161	.026167	3485.1	6.5947	.025148	3480.0	6.5738	.024199
570	3520.8	6.6688	.027710	3516.0	6.6470	.026599	3511.1	6.6258	.025568	3506.3	6.6052	.024608
580	3546.3	6.6989	.028150	3541.7	6.6773	.027027	3537.0	6.6563	.025984	3532.4	6.6359	.025013
590	3571.7	6.7285	.028586	3567.3	6.7071	.027450	3562.8	6.6863	.026396	3558.3	6.6661	.025414
600	3597.1	6.7577	.029019	3592.8	6.7365	.027870	3588.5	6.7159	.026804	3584.1	6.6959	.025811

TABLE 3 WATER AND STEAM

p(MPa)	= 13.000			= 13.500			= 14.000			= 14.500		
SAT t(°C)	330.83			333.78			336.64			339.42		
SAT.LIQ	1532.0	3.5616	.0015672	1551.9	3.5931	.0015885	1571.6	3.6242	.0016106	1591.3	3.6551	.0016337
SAT.VAP	2667.0	5.4408	.01280	2655.0	5.4107	.01213	2642.4	5.3803	.01150	2629.1	5.3493	.01090
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3622.4	6.7865	.029448	3618.2	6.7655	.028287	3614.0	6.7450	.027208	3609.8	6.7252	.026204
620	3647.6	6.8149	.029874	3643.6	6.7940	.028700	3639.5	6.7737	.027609	3635.5	6.7540	.026594
630	3672.7	6.8429	.030297	3668.8	6.8221	.029110	3664.9	6.8020	.028007	3661.0	6.7825	.026981
640	3697.9	6.8706	.030718	3694.1	6.8499	.029517	3690.3	6.8299	.028403	3686.5	6.8105	.027365
650	3722.9	6.8979	.031135	3719.3	6.8774	.029922	3715.6	6.8575	.028795	3711.9	6.8382	.027747
660	3748.0	6.9249	.031550	3744.4	6.9045	.030324	3740.9	6.8847	.029186	3737.3	6.8656	.028125
670	3773.0	6.9515	.031963	3769.6	6.9313	.030724	3766.1	6.9117	.029573	3762.7	6.8926	.028502
680	3798.0	6.9779	.032374	3794.7	6.9578	.031122	3791.3	6.9383	.029959	3788.0	6.9193	.028876
690	3823.0	7.0040	.032782	3819.8	6.9840	.031517	3816.5	6.9645	.030342	3813.3	6.9457	.029248
700	3848.0	7.0298	.033189	3844.9	7.0099	.031910	3841.7	6.9906	.030723	3838.6	6.9718	.029618
710	3873.0	7.0553	.033593	3869.9	7.0355	.032302	3866.9	7.0163	.031103	3863.8	6.9977	.029986
720	3898.0	7.0806	.033996	3895.0	7.0609	.032691	3892.0	7.0417	.031480	3889.1	7.0232	.030352
730	3922.9	7.1057	.034397	3920.1	7.0860	.033079	3917.2	7.0669	.031856	3914.3	7.0485	.030717
740	3947.9	7.1304	.034796	3945.1	7.1108	.033465	3942.3	7.0919	.032230	3939.6	7.0735	.031079
750	3972.9	7.1550	.035194	3970.2	7.1355	.033850	3967.5	7.1166	.032602	3964.8	7.0983	.031440
760	3997.9	7.1793	.035590	3995.3	7.1599	.034233	3992.6	7.1411	.032973	3990.0	7.1228	.031800
770	4022.9	7.2034	.035984	4020.4	7.1840	.034614	4017.8	7.1653	.033342	4015.3	7.1472	.032157
780	4047.9	7.2272	.036377	4045.4	7.2080	.034994	4043.0	7.1893	.033710	4040.5	7.1712	.032514
790	4072.9	7.2509	.036769	4070.5	7.2317	.035373	4068.1	7.2131	.034076	4065.7	7.1951	.032869
800	4098.0	7.2743	.037160	4095.6	7.2552	.035750	4093.3	7.2367	.034441	4091.0	7.2187	.033223

TABLE 3 WATER AND STEAM

p(MPa)	= 15.000			= 15.500			= 16.000			= 16.500		
SAT t(°C)	342.13			344.76			347.33			349.83		
SAT.LIQ	1611.0	3.6859	.0016579	1630.7	3.7165	.0016834	1650.5	3.7471	.0017103	1670.5	3.7779	.0017390
SAT.VAP	2615.0	5.3178	.01034	2600.3	5.2858	.00981	2584.9	5.2531	.00931	2568.8	5.2200	.00883
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	15.1	.0007	.0009928	15.6	.0007	.0009926	16.1	.0008	.0009923	16.6	.0008	.0009921
10	56.5	.1495	.0009933	57.0	.1494	.0009931	57.5	.1494	.0009928	58.0	.1493	.0009926
20	97.9	.2931	.0009950	98.3	.2929	.0009948	98.8	.2928	.0009946	99.3	.2927	.0009944
30	139.3	.4319	.0009977	139.7	.4317	.0009975	140.2	.4315	.0009973	140.6	.4314	.0009971
40	180.7	.5663	.0010013	181.1	.5661	.0010011	181.6	.5659	.0010009	182.0	.5657	.0010006
50	222.1	.6966	.0010055	222.6	.6963	.0010053	223.0	.6961	.0010051	223.4	.6959	.0010049
60	263.6	.8230	.0010105	264.0	.8228	.0010102	264.5	.8225	.0010100	264.9	.8223	.0010098
70	305.2	.9459	.0010160	305.6	.9456	.0010158	306.0	.9453	.0010156	306.4	.9451	.0010153
80	346.8	1.0655	.0010221	347.2	1.0652	.0010219	347.6	1.0648	.0010217	348.0	1.0645	.0010215
90	388.5	1.1819	.0010289	388.9	1.1815	.0010286	389.3	1.1812	.0010284	389.7	1.1808	.0010281
100	430.3	1.2954	.0010361	430.7	1.2950	.0010359	431.0	1.2946	.0010356	431.4	1.2943	.0010354
110	472.2	1.4062	.0010439	472.5	1.4058	.0010437	472.9	1.4054	.0010434	473.3	1.4050	.0010432
120	514.2	1.5144	.0010523	514.5	1.5140	.0010521	514.9	1.5136	.0010518	515.3	1.5131	.0010515
130	556.4	1.6204	.0010613	556.7	1.6199	.0010610	557.0	1.6194	.0010607	557.4	1.6190	.0010604
140	598.7	1.7241	.0010709	599.0	1.7236	.0010706	599.4	1.7231	.0010703	599.7	1.7226	.0010700
150	641.3	1.8259	.0010811	641.6	1.8254	.0010807	641.9	1.8248	.0010804	642.2	1.8243	.0010801
160	684.0	1.9258	.0010919	684.3	1.9253	.0010916	684.6	1.9247	.0010913	685.0	1.9241	.0010909
170	727.1	2.0241	.0011035	727.4	2.0235	.0011032	727.7	2.0229	.0011028	727.9	2.0223	.0011024
180	770.4	2.1208	.0011159	770.7	2.1201	.0011155	771.0	2.1195	.0011151	771.2	2.1189	.0011147
190	814.1	2.2161	.0011291	814.3	2.2154	.0011287	814.6	2.2147	.0011283	814.8	2.2141	.0011278
200	858.1	2.3102	.0011433	858.4	2.3094	.0011428	858.6	2.3087	.0011423	858.8	2.3080	.0011419
210	902.6	2.4032	.0011584	902.8	2.4024	.0011579	903.0	2.4016	.0011574	903.2	2.4008	.0011569
220	947.6	2.4953	.0011748	947.7	2.4944	.0011742	947.9	2.4936	.0011736	948.1	2.4928	.0011731
230	993.1	2.5867	.0011924	993.2	2.5857	.0011918	993.4	2.5848	.0011912	993.5	2.5839	.0011905
240	1039.2	2.6775	.0012115	1039.3	2.6765	.0012108	1039.4	2.6755	.0012102	1039.5	2.6745	.0012095
250	1086.2	2.7680	.0012324	1086.2	2.7670	.0012316	1086.3	2.7659	.0012308	1086.3	2.7648	.0012301
260	1134.0	2.8585	.0012553	1133.9	2.8573	.0012544	1133.9	2.8561	.0012535	1133.9	2.8550	.0012526
270	1182.8	2.9493	.0012807	1182.7	2.9480	.0012796	1182.6	2.9466	.0012786	1182.6	2.9453	.0012776
280	1232.9	3.0407	.0013090	1232.7	3.0392	.0013078	1232.6	3.0377	.0013065	1232.4	3.0363	.0013053
290	1284.6	3.1333	.0013411	1284.3	3.1316	.0013396	1284.0	3.1299	.0013381	1283.7	3.1282	.0013366
300	1338.3	3.2278	.0013779	1337.8	3.2258	.0013761	1337.4	3.2238	.0013743	1337.0	3.2219	.0013725

TABLE 3 WATER AND STEAM

p(MPa)	= 15.000			= 15.500			= 16.000			= 16.500		
SAT t(°C)	342.13			344.76			347.33			349.83		
SAT.LIQ	1611.0	3.6859	.0016579	1630.7	3.7165	.0016834	1650.5	3.7471	.0017103	1670.5	3.7779	.0017390
SAT.VAP	2615.0	5.3178	.01034	2600.3	5.2858	.00981	2584.9	5.2531	.00931	2568.8	5.2200	.00883
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1394.5	3.3250	.0014212	1393.8	3.3227	.0014189	1393.2	3.3204	.0014166	1392.6	3.3181	.0014143
320	1454.3	3.4267	.0014736	1453.3	3.4238	.0014705	1452.4	3.4210	.0014674	1451.5	3.4182	.0014644
330	1519.4	3.5355	.0015402	1517.9	3.5317	.0015357	1516.4	3.5280	.0015313	1515.0	3.5244	.0015270
340	1593.3	3.6571	.0016324	1590.7	3.6515	.0016248	1588.3	3.6462	.0016176	1586.0	3.6411	.0016108
350	2694.8	5.4467	.011462	2660.4	5.3826	.010615	2620.8	5.3109	.0097637	2571.7	5.2247	.0088661
360	2770.8	5.5677	.012562	2744.6	5.5168	.011787	2716.5	5.4634	.011036	2686.0	5.4067	.010304
370	2833.6	5.6662	.013481	2812.4	5.6230	.012740	2789.9	5.5784	.012030	2766.1	5.5323	.011349
380	2887.7	5.7497	.014282	2869.8	5.7116	.013558	2851.1	5.6729	.012871	2831.6	5.6333	.012215
390	2935.7	5.8225	.015001	2920.1	5.7881	.014286	2904.1	5.7534	.013608	2887.4	5.7183	.012966
400	2979.1	5.8876	.015661	2965.4	5.8558	.014948	2951.3	5.8240	.014275	2936.7	5.7920	.013638
410	3019.3	5.9469	.016276	3006.9	5.9171	.015562	2994.3	5.8874	.014889	2981.3	5.8578	.014254
420	3057.0	6.0016	.016857	3045.7	5.9735	.016139	3034.2	5.9455	.015464	3022.5	5.9176	.014827
430	3092.7	6.0528	.017410	3082.3	6.0259	.016687	3071.8	5.9993	.016008	3061.0	5.9728	.015368
440	3126.9	6.1010	.017940	3117.2	6.0752	.017212	3107.5	6.0497	.016527	3097.5	6.0244	.015883
450	3159.7	6.1468	.018451	3150.7	6.1219	.017716	3141.6	6.0972	.017025	3132.4	6.0729	.016376
460	3191.5	6.1904	.018946	3183.1	6.1663	.018203	3174.5	6.1425	.017506	3165.9	6.1190	.016850
470	3222.3	6.2322	.019426	3214.4	6.2087	.018676	3206.4	6.1856	.017971	3198.3	6.1629	.017309
480	3252.4	6.2724	.019893	3244.9	6.2495	.019135	3237.4	6.2270	.018423	3229.8	6.2049	.017754
490	3281.8	6.3112	.020349	3274.7	6.2888	.019583	3267.6	6.2669	.018864	3260.4	6.2453	.018187
500	3310.6	6.3487	.020795	3303.9	6.3268	.020020	3297.1	6.3054	.019293	3290.3	6.2843	.018610
510	3338.9	6.3850	.021233	3332.5	6.3636	.020449	3326.1	6.3426	.019714	3319.7	6.3220	.019023
520	3366.8	6.4204	.021662	3360.7	6.3993	.020869	3354.6	6.3787	.020126	3348.5	6.3585	.019427
530	3394.3	6.4548	.022084	3388.5	6.4341	.021282	3382.7	6.4139	.020531	3376.8	6.3940	.019824
540	3421.4	6.4885	.022499	3415.9	6.4681	.021689	3410.3	6.4481	.020928	3404.7	6.4286	.020214
550	3448.3	6.5213	.022909	3443.0	6.5012	.022089	3437.7	6.4816	.021320	3432.4	6.4624	.020598
560	3475.0	6.5535	.023313	3469.9	6.5337	.022484	3464.8	6.5143	.021706	3459.7	6.4953	.020976
570	3501.4	6.5851	.023712	3496.5	6.5655	.022873	3491.6	6.5463	.022087	3486.7	6.5276	.021348
580	3527.7	6.6160	.024107	3523.0	6.5967	.023259	3518.3	6.5777	.022463	3513.5	6.5592	.021716
590	3553.8	6.6465	.024497	3549.3	6.6273	.023640	3544.7	6.6086	.022835	3540.2	6.5903	.022080
600	3579.8	6.6764	.024884	3575.4	6.6574	.024017	3571.0	6.6389	.023204	3566.6	6.6208	.022440

TABLE 3 WATER AND STEAM

p(MPa)	= 15.000			= 15.500			= 16.000			= 16.500		
SAT t(°C)	342.13			344.76			347.33			349.83		
SAT.LIQ	1611.0	3.6859	.0016579	1630.7	3.7165	.0016834	1650.5	3.7471	.0017103	1670.5	3.7779	.0017390
SAT.VAP	2615.0	5.3178	.01034	2600.3	5.2858	.00951	2584.9	5.2531	.00931	2568.8	5.2200	.00883
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3605.6	6.7058	.025267	3601.4	6.6870	.024390	3597.2	6.6687	.023568	3593.0	6.6507	.022796
620	3631.4	6.7349	.025646	3627.3	6.7162	.024760	3623.3	6.6980	.023929	3619.2	6.6802	.023148
630	3657.1	6.7635	.026023	3653.2	6.7449	.025127	3649.2	6.7269	.024287	3645.3	6.7093	.023497
640	3682.7	6.7917	.026397	3678.9	6.7733	.025491	3675.1	6.7554	.024642	3671.3	6.7379	.023844
650	3708.3	6.8195	.026768	3704.6	6.8013	.025852	3700.9	6.7835	.024994	3697.2	6.7662	.024187
660	3733.8	6.8470	.027136	3730.2	6.8289	.026211	3726.6	6.8112	.025343	3723.1	6.7940	.024528
670	3759.2	6.8741	.027502	3755.8	6.8561	.026567	3752.3	6.8386	.025690	3748.9	6.8215	.024866
680	3784.7	6.9009	.027866	3781.3	6.8831	.026921	3778.0	6.8656	.026035	3774.6	6.8487	.025202
690	3810.1	6.9274	.028227	3806.8	6.9097	.027272	3803.6	6.8924	.026377	3800.3	6.8755	.025536
700	3835.4	6.9536	.028587	3832.3	6.9360	.027622	3829.1	6.9188	.026717	3826.0	6.9020	.025868
710	3860.8	6.9796	.028944	3857.7	6.9620	.027969	3854.7	6.9449	.027056	3851.6	6.9282	.026197
720	3886.1	7.0052	.029300	3883.2	6.9877	.028315	3880.2	6.9707	.027392	3877.2	6.9542	.026525
730	3911.5	7.0306	.029653	3908.6	7.0132	.028659	3905.7	6.9963	.027727	3902.8	6.9798	.026851
740	3936.8	7.0557	.030005	3934.0	7.0384	.029001	3931.2	7.0216	.028060	3928.4	7.0052	.027175
750	3962.1	7.0806	.030356	3959.4	7.0633	.029342	3956.7	7.0466	.028391	3954.0	7.0303	.027498
760	3987.4	7.1052	.030705	3984.8	7.0880	.029681	3982.1	7.0714	.028721	3979.5	7.0551	.027819
770	4012.7	7.1296	.031052	4010.2	7.1125	.030018	4007.6	7.0959	.029049	4005.0	7.0797	.028138
780	4038.0	7.1537	.031398	4035.5	7.1367	.030354	4033.1	7.1202	.029376	4030.6	7.1041	.028456
790	4063.3	7.1776	.031742	4060.9	7.1607	.030689	4058.5	7.1442	.029701	4056.1	7.1282	.028773
800	4088.6	7.2013	.032086	4086.3	7.1845	.031022	4084.0	7.1681	.030025	4081.6	7.1521	.029088

TABLE 3 WATER AND STEAM

p(MPa)	= 17.000			= 17.500			= 18.000			= 18.500		
SAT t(°C)	352.26			354.64			356.96			359.22		
SAT.LIQ	1691.7	3.8107	.0017696	1713.3	3.8438	.0018031	1734.8	3.8765	.0018399	1756.5	3.9094	.0018806
SAT.VAP	2551.6	5.1855	.00837	2533.3	5.1498	.00793	2513.9	5.1128	.00750	2493.1	5.0741	.00708
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	17.1	.0008	.0009919	17.6	.0008	.0009916	18.1	.0008	.0009914	18.6	.0008	.0009911
10	58.4	.1493	.0009924	58.9	.1492	.0009922	59.4	.1491	.0009919	59.9	.1491	.0009917
20	99.7	.2926	.0009942	100.2	.2925	.0009939	100.7	.2924	.0009937	101.1	.2923	.0009935
30	141.1	.4312	.0009969	141.5	.4311	.0009967	142.0	.4309	.0009965	142.4	.4307	.0009963
40	182.4	.5655	.0010004	182.9	.5653	.0010002	183.3	.5651	.0010000	183.7	.5649	.0009998
50	223.8	.6956	.0010047	224.3	.6954	.0010045	224.7	.6952	.0010043	225.1	.6950	.0010041
60	265.3	.8220	.0010096	265.7	.8217	.0010094	266.1	.8215	.0010092	266.6	.8212	.0010090
70	306.8	.9448	.0010151	307.2	.9445	.0010149	307.6	.9442	.0010147	308.0	.9439	.0010145
80	348.4	1.0642	.0010212	348.8	1.0639	.0010210	349.2	1.0636	.0010208	349.6	1.0632	.0010206
90	390.0	1.1805	.0010279	390.4	1.1801	.0010277	390.8	1.1798	.0010274	391.2	1.1795	.0010272
100	431.8	1.2939	.0010351	432.2	1.2935	.0010349	432.5	1.2931	.0010346	432.9	1.2928	.0010344
110	473.6	1.4046	.0010429	474.0	1.4042	.0010427	474.4	1.4038	.0010424	474.7	1.4034	.0010422
120	515.6	1.5127	.0010513	516.0	1.5123	.0010510	516.3	1.5118	.0010507	516.7	1.5114	.0010505
130	557.7	1.6185	.0010602	558.1	1.6181	.0010599	558.4	1.6176	.0010596	558.8	1.6171	.0010593
140	600.0	1.7222	.0010697	600.4	1.7217	.0010694	600.7	1.7212	.0010691	601.0	1.7207	.0010688
150	642.5	1.8238	.0010798	642.9	1.8233	.0010795	643.2	1.8228	.0010792	643.5	1.8222	.0010788
160	685.3	1.9236	.0010906	685.6	1.9230	.0010902	685.9	1.9225	.0010899	686.2	1.9219	.0010896
170	728.2	2.0217	.0011021	728.5	2.0211	.0011017	728.8	2.0205	.0011014	729.1	2.0199	.0011010
180	771.5	2.1182	.0011143	771.8	2.1176	.0011139	772.0	2.1170	.0011136	772.3	2.1163	.0011132
190	815.1	2.2134	.0011274	815.3	2.2127	.0011270	815.6	2.2120	.0011266	815.8	2.2114	.0011262
200	859.0	2.3073	.0011414	859.3	2.3065	.0011410	859.5	2.3058	.0011405	859.7	2.3051	.0011400
210	903.4	2.4001	.0011564	903.6	2.3993	.0011559	903.8	2.3985	.0011554	904.0	2.3977	.0011549
220	948.3	2.4919	.0011725	948.4	2.4911	.0011720	948.6	2.4903	.0011714	948.8	2.4894	.0011709
230	993.6	2.5830	.0011899	993.8	2.5821	.0011893	993.9	2.5812	.0011887	994.1	2.5803	.0011881
240	1039.6	2.6735	.0012088	1039.7	2.6726	.0012081	1039.8	2.6716	.0012074	1039.9	2.6706	.0012067
250	1086.4	2.7637	.0012293	1086.4	2.7626	.0012285	1086.5	2.7616	.0012278	1086.5	2.7605	.0012270
260	1133.9	2.8538	.0012517	1133.9	2.8526	.0012509	1133.9	2.8514	.0012500	1133.9	2.8503	.0012491
270	1182.5	2.9440	.0012765	1182.4	2.9427	.0012755	1182.4	2.9414	.0012745	1182.3	2.9401	.0012735
280	1232.3	3.0348	.0013041	1232.1	3.0333	.0013029	1231.9	3.0319	.0013018	1231.8	3.0305	.0013006
290	1283.5	3.1266	.0013352	1283.2	3.1249	.0013338	1283.0	3.1233	.0013324	1282.7	3.1217	.0013310
300	1336.5	3.2200	.0013707	1336.1	3.2181	.0013690	1335.7	3.2162	.0013673	1335.4	3.2143	.0013656

TABLE 3 WATER AND STEAM

p(MPa)	= 17.000			= 17.500			= 18.000			= 18.500		
SAT t(°C)	352.26			354.64			356.96			359.22		
SAT.LIQ	1691.7	3.8107	.0017696	1713.3	3.8438	.0018031	1734.8	3.8765	.0018399	1756.5	3.9094	.0018806
SAT.VAP	2551.6	5.1855	.00837	2533.3	5.1498	.00793	2513.9	5.1128	.00750	2493.1	5.0741	.00708
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1392.0	3.3158	.0014121	1391.4	3.3136	.0014099	1390.8	3.3114	.0014077	1390.2	3.3092	.0014056
320	1450.6	3.4154	.0014615	1449.7	3.4127	.0014586	1448.8	3.4101	.0014558	1448.0	3.4075	.0014531
330	1513.7	3.5209	.0015229	1512.3	3.5175	.0015189	1511.1	3.5141	.0015150	1509.8	3.5108	.0015112
340	1583.8	3.6362	.0016042	1581.7	3.6315	.0015980	1579.7	3.6269	.0015920	1577.8	3.6225	.0015863
350	1667.7	3.7720	.0017283	1663.6	3.7640	.0017158	1659.8	3.7566	.0017043	1656.3	3.7496	.0016938
360	2652.4	5.3458	.0095837	2614.8	5.2791	.0088639	2569.1	5.2002	.0081042	2510.8	5.1020	.0072669
370	2740.7	5.4842	.010691	2713.5	5.4339	.010053	2684.2	5.3808	.0094298	2652.5	5.3244	.0088174
380	2811.0	5.5928	.011588	2789.4	5.5510	.010985	2766.6	5.5079	.010405	2742.4	5.4632	.0098435
390	2870.2	5.6827	.012354	2852.2	5.6464	.011771	2833.4	5.6095	.011212	2813.9	5.5717	.010676
400	2921.7	5.7599	.013034	2906.3	5.7274	.012460	2890.3	5.6947	.011913	2873.8	5.6615	.011390
410	2968.0	5.8281	.013652	2954.4	5.7984	.013082	2940.4	5.7686	.012540	2926.1	5.7386	.012024
420	3010.5	5.8899	.014225	2998.3	5.8622	.013655	2985.8	5.8345	.013115	2973.0	5.8068	.012601
430	3050.1	5.9466	.014764	3039.0	5.9205	.014192	3027.6	5.8945	.013650	3016.1	5.8685	.013136
440	3087.5	5.9993	.015274	3077.2	5.9745	.014700	3066.9	5.9498	.014155	3056.3	5.9253	.013639
450	3123.1	6.0489	.015763	3113.6	6.0251	.015164	3104.0	6.0015	.014636	3094.3	5.9781	.014116
460	3157.2	6.0958	.016232	3148.4	6.0729	.015648	3139.4	6.0502	.015096	3130.4	6.0278	.014572
470	3190.2	6.1404	.016685	3181.9	6.1183	.016096	3173.5	6.0964	.015538	3165.1	6.0748	.015010
480	3222.1	6.1831	.017124	3214.3	6.1617	.016529	3206.5	6.1405	.015966	3198.6	6.1195	.015433
490	3253.1	6.2241	.017551	3245.8	6.2032	.016949	3238.4	6.1826	.016381	3231.0	6.1623	.015843
500	3283.5	6.2636	.017966	3276.5	6.2432	.017359	3269.6	6.2232	.016785	3262.5	6.2034	.016241
510	3313.1	6.3017	.018372	3306.6	6.2818	.017758	3300.0	6.2622	.017178	3293.3	6.2429	.016629
520	3342.3	6.3387	.018770	3336.0	6.3192	.018149	3329.8	6.3000	.017563	3323.4	6.2812	.017008
530	3370.9	6.3746	.019159	3365.0	6.3556	.018532	3359.0	6.3366	.017939	3353.0	6.3182	.017378
540	3399.1	6.4095	.019542	3393.5	6.3907	.018907	3387.8	6.3722	.018308	3382.0	6.3541	.017741
550	3427.0	6.4435	.019918	3421.6	6.4250	.019276	3416.1	6.4069	.018670	3410.6	6.3891	.018097
560	3454.5	6.4768	.020288	3449.3	6.4586	.019639	3444.1	6.4407	.019027	3438.9	6.4232	.018447
570	3481.8	6.5093	.020653	3476.8	6.4913	.019997	3471.8	6.4737	.019378	3466.8	6.4565	.018792
580	3508.8	6.5411	.021013	3504.0	6.5234	.020350	3499.2	6.5061	.019724	3494.4	6.4891	.019131
590	3535.6	6.5724	.021369	3531.0	6.5549	.020699	3526.4	6.5378	.020065	3521.8	6.5209	.019466
600	3562.2	6.6031	.021721	3557.8	6.5858	.021043	3553.4	6.5688	.020403	3548.9	6.5522	.019797

TABLE 3 WATER AND STEAM

p(MPa)	= 17.000			= 17.500			= 18.000			18.500		
SAT t(°C)	352.26			354.64			356.96			359.22		
SAT.LIQ	1691.7	3.8107	.0017696	1713.3	3.8438	.0018031	1734.8	3.8765	.0018399	1756.5	3.9094	.0018806
SAT.VAP	2551.6	5.1855	.00837	2533.3	5.1498	.00793	2513.9	5.1128	.00750	2493.1	5.0741	.00708
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3588.7	6.6332	.022069	3584.5	6.6161	.021383	3580.2	6.5994	.020736	3575.9	6.5829	.020124
620	3615.1	6.6629	.022413	3611.0	6.6460	.021720	3606.8	6.6294	.021066	3602.7	6.6131	.020447
630	3641.3	6.6921	.022755	3637.3	6.6753	.022054	3633.4	6.6589	.021393	3629.4	6.6428	.020767
640	3667.4	6.7209	.023093	3663.6	6.7042	.022385	3659.8	6.6880	.021716	3655.9	6.6720	.021084
650	3693.5	6.7493	.023428	3689.8	6.7328	.022713	3686.1	6.7166	.022037	3682.4	6.7008	.021398
660	3719.5	6.7773	.023761	3715.9	6.7609	.023038	3712.3	6.7449	.022355	3708.7	6.7292	.021709
670	3745.4	6.8049	.024091	3741.9	6.7886	.023360	3738.4	6.7727	.022670	3734.9	6.7572	.022017
680	3771.2	6.8322	.024419	3767.9	6.8160	.023681	3764.5	6.8002	.022983	3761.1	6.7848	.022324
690	3797.1	6.8591	.024745	3793.8	6.8431	.023999	3790.5	6.8274	.023294	3787.3	6.8121	.022627
700	3822.8	6.8857	.025068	3819.7	6.8698	.024314	3816.5	6.8542	.023603	3813.3	6.8390	.022929
710	3848.6	6.9120	.025390	3845.5	6.8962	.024628	3842.4	6.8807	.023909	3839.4	6.8656	.023229
720	3874.3	6.9380	.025709	3871.3	6.9223	.024940	3868.3	6.9069	.024214	3865.3	6.8919	.023527
730	3899.9	6.9638	.026027	3897.1	6.9481	.025250	3894.2	6.9328	.024517	3891.3	6.9179	.023823
740	3925.6	6.9892	.026343	3922.8	6.9736	.025559	3920.0	6.9585	.024818	3917.2	6.9436	.024117
750	3951.2	7.0144	.026658	3948.5	6.9989	.025865	3945.8	6.9838	.025117	3943.1	6.9691	.024409
760	3976.9	7.0393	.026970	3974.2	7.0239	.026170	3971.6	7.0089	.025415	3969.0	6.9942	.024700
770	4002.5	7.0640	.027282	3999.9	7.0487	.026474	3997.4	7.0337	.025711	3994.8	7.0191	.024989
780	4028.1	7.0884	.027591	4025.6	7.0732	.026776	4023.1	7.0583	.026006	4020.7	7.0438	.025277
790	4053.7	7.1126	.027900	4051.3	7.0974	.027076	4048.9	7.0826	.026299	4046.5	7.0682	.025564
800	4079.3	7.1366	.028207	4077.0	7.1215	.027376	4074.6	7.1067	.026591	4072.3	7.0923	.025849

TABLE 3 WATER AND STEAM

p(MPa)	= 19.000			= 19.500			= 20.000			= 20.500		
SAT t(°C)	361.43			363.59			365.70			367.77		
SAT.LIQ	1778.7	3.9429	.0019260	1801.8	3.9777	.0019775	1826.5	4.0149	.0020370	1853.9	4.0561	.0021088
SAT.VAP	2470.6	5.0332	.00668	2446.0	4.9893	.00628	2418.4	4.9412	.00588	2386.4	4.8869	.00546
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	19.1	.0008	.0009909	19.6	.0008	.0009907	20.1	.0008	.0009904	20.6	.0008	.0009902
10	60.4	.1490	.0009915	60.8	.1490	.0009913	61.3	.1489	.0009910	61.8	.1488	.0009908
20	101.6	.2921	.0009933	102.1	.2920	.0009931	102.5	.2919	.0009929	103.0	.2918	.0009926
30	142.9	.4306	.0009960	143.3	.4304	.0009958	143.8	.4303	.0009956	144.2	.4301	.0009954
40	184.2	.5647	.0009996	184.6	.5645	.0009994	185.1	.5643	.0009992	185.5	.5641	.0009990
50	225.6	.6947	.0010038	226.0	.6945	.0010036	226.4	.6943	.0010034	226.8	.6940	.0010032
60	267.0	.8209	.0010087	267.4	.8207	.0010085	267.8	.8204	.0010083	268.2	.8202	.0010081
70	308.4	.9436	.0010142	308.9	.9433	.0010140	309.3	.9430	.0010138	309.7	.9427	.0010136
80	350.0	1.0629	.0010203	350.4	1.0626	.0010201	350.8	1.0623	.0010199	351.2	1.0620	.0010197
90	391.6	1.1791	.0010270	392.0	1.1788	.0010267	392.4	1.1784	.0010265	392.8	1.1781	.0010263
100	433.3	1.2924	.0010342	433.7	1.2920	.0010339	434.0	1.2916	.0010337	434.4	1.2913	.0010334
110	475.1	1.4030	.0010419	475.5	1.4026	.0010416	475.8	1.4022	.0010414	476.2	1.4018	.0010411
120	517.0	1.5110	.0010502	517.4	1.5106	.0010499	517.7	1.5101	.0010497	518.1	1.5097	.0010494
130	559.1	1.6167	.0010590	559.5	1.6162	.0010588	559.8	1.6158	.0010585	560.2	1.6153	.0010582
140	601.4	1.7202	.0010685	601.7	1.7197	.0010682	602.0	1.7192	.0010679	602.4	1.7187	.0010676
150	643.8	1.8217	.0010785	644.1	1.8212	.0010782	644.4	1.8207	.0010779	644.8	1.8202	.0010776
160	686.5	1.9214	.0010892	686.8	1.9208	.0010889	687.1	1.9203	.0010886	687.4	1.9197	.0010882
170	729.4	2.0193	.0011006	729.7	2.0187	.0011003	730.0	2.0181	.0010999	730.3	2.0176	.0010996
180	772.6	2.1157	.0011128	772.9	2.1151	.0011124	773.1	2.1145	.0011120	773.4	2.1138	.0011116
190	816.1	2.2107	.0011257	816.4	2.2100	.0011253	816.6	2.2093	.0011249	816.9	2.2087	.0011245
200	860.0	2.3044	.0011396	860.2	2.3037	.0011391	860.4	2.3030	.0011387	860.7	2.3022	.0011382
210	904.2	2.3970	.0011544	904.4	2.3962	.0011539	904.6	2.3954	.0011534	904.9	2.3947	.0011530
220	949.0	2.4886	.0011704	949.1	2.4878	.0011698	949.3	2.4869	.0011693	949.5	2.4861	.0011687
230	994.2	2.5794	.0011875	994.4	2.5785	.0011869	994.5	2.5776	.0011863	994.6	2.5768	.0011857
240	1040.1	2.6696	.0012061	1040.2	2.6687	.0012054	1040.3	2.6677	.0012047	1040.4	2.6668	.0012041
250	1086.6	2.7595	.0012262	1086.7	2.7584	.0012255	1086.7	2.7574	.0012247	1086.8	2.7563	.0012240
260	1133.9	2.8491	.0012483	1133.9	2.8480	.0012474	1134.0	2.8468	.0012466	1134.0	2.8457	.0012457
270	1182.2	2.9389	.0012725	1182.2	2.9376	.0012715	1182.1	2.9363	.0012706	1182.1	2.9351	.0012696
280	1231.7	3.0290	.0012994	1231.5	3.0276	.0012983	1231.4	3.0262	.0012971	1231.3	3.0248	.0012960
290	1282.5	3.1201	.0013296	1282.2	3.1185	.0013282	1282.0	3.1169	.0013269	1281.8	3.1153	.0013256
300	1335.0	3.2125	.0013639	1334.6	3.2107	.0013622	1334.3	3.2089	.0013606	1333.9	3.2071	.0013590

TABLE 3 WATER AND STEAM

p(MPa)	= 19.000			= 19.500			= 20.000			= 20.500		
SAT t(°C)	361.43			363.59			365.70			367.77		
SAT.LIQ	1778.7	3.9429	.0019260	1801.8	3.9777	.0019775	1826.5	4.0149	.0020370	1853.9	4.0561	.0021088
SAT.VAP	2470.6	5.0332	.00668	2446.0	4.9893	.00628	2418.4	4.9412	.00588	2386.4	4.8869	.00546
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1389.7	3.3071	.0014035	1389.1	3.3049	.0014015	1388.6	3.3028	.0013994	1388.1	3.3007	.0013974
320	1447.2	3.4049	.0014504	1446.4	3.4023	.0014477	1445.6	3.3998	.0014451	1444.9	3.3973	.0014425
330	1508.7	3.5076	.0015075	1507.5	3.5044	.0015039	1506.4	3.5013	.0015004	1505.3	3.4983	.0014970
340	1575.9	3.6182	.0015808	1574.2	3.6140	.0015755	1572.4	3.6100	.0015704	1570.8	3.6060	.0015655
350	1653.1	3.7430	.0016839	1650.0	3.7368	.0016748	1647.2	3.7308	.0016662	1644.5	3.7252	.0016580
360	1758.0	3.9102	.0018754	1749.8	3.8959	.0018490	1742.9	3.8835	.0018269	1736.8	3.8729	.0018077
370	2617.7	5.2637	.0082105	2576.6	5.1935	.0075745	2527.6	5.1117	.0069078	2464.7	5.0088	.0061619
380	2716.8	5.4166	.0092983	2689.4	5.3678	.0087666	2660.2	5.3165	.0082458	2628.7	5.2622	.0077331
390	2793.4	5.5330	.010160	2771.9	5.4931	.0096625	2749.3	5.4520	.0091805	2725.6	5.4094	.0087126
400	2856.7	5.6278	.010889	2838.9	5.5935	.010409	2820.5	5.5585	.0099470	2801.3	5.5228	.0095016
410	2911.3	5.7083	.011531	2896.1	5.6778	.011059	2880.4	5.6470	.010608	2864.3	5.6157	.010174
420	2960.0	5.7791	.012111	2946.6	5.7512	.011644	2932.9	5.7232	.011197	2918.9	5.6951	.010770
430	3004.4	5.8427	.012647	2992.4	5.8168	.012181	2980.2	5.7910	.011736	2967.7	5.7650	.011311
440	3045.6	5.9009	.013148	3034.7	5.8766	.012681	3023.7	5.8523	.012236	3012.4	5.8282	.011811
450	3084.4	5.9549	.013623	3074.4	5.9319	.013154	3064.3	5.9089	.012707	3054.0	5.8861	.012281
460	3121.3	6.0056	.014075	3112.0	5.9835	.013603	3102.7	5.9616	.013154	3093.2	5.9399	.012725
470	3156.6	6.0534	.014509	3148.0	6.0322	.014034	3139.2	6.0112	.013581	3130.4	5.9903	.013149
480	3190.6	6.0988	.014928	3182.5	6.0784	.014448	3174.4	6.0581	.013991	3166.1	6.0381	.013556
490	3223.5	6.1423	.015333	3215.9	6.1224	.014848	3208.3	6.1028	.014388	3200.5	6.0834	.013949
500	3255.4	6.1839	.015726	3248.3	6.1646	.015237	3241.1	6.1456	.014771	3233.8	6.1268	.014329
510	3286.6	6.2239	.016108	3279.9	6.2052	.015614	3273.1	6.1867	.015144	3266.2	6.1684	.014697
520	3317.1	6.2626	.016481	3310.7	6.2443	.015982	3304.2	6.2262	.015507	3297.7	6.2084	.015056
530	3346.9	6.3000	.016846	3340.9	6.2821	.016341	3334.7	6.2644	.015862	3328.6	6.2470	.015405
540	3376.3	6.3363	.017203	3370.5	6.3188	.016693	3364.7	6.3015	.016208	3358.8	6.2845	.015747
550	3405.2	6.3716	.017554	3399.6	6.3544	.017038	3394.1	6.3374	.016548	3388.5	6.3207	.016082
560	3433.6	6.4060	.017898	3428.3	6.3891	.017376	3423.0	6.3724	.016881	3417.7	6.3560	.016410
570	3461.8	6.4395	.018236	3456.7	6.4229	.017709	3451.6	6.4065	.017209	3446.5	6.3904	.016732
580	3489.6	6.4723	.018570	3484.7	6.4559	.018037	3479.9	6.4398	.017531	3475.0	6.4240	.017049
590	3517.1	6.5045	.018899	3512.5	6.4883	.018360	3507.8	6.4724	.017848	3503.1	6.4568	.017362
600	3544.5	6.5360	.019223	3540.0	6.5200	.018679	3535.5	6.5043	.018161	3531.0	6.4889	.017669

TABLE 3 WATER AND STEAM

p(MPa)	= 19.000			= 19.500			= 20.000			= 20.500		
SAT t(°C)	361.43			363.59			365.70			367.77		
SAT.LIQ	1778.7	3.9429	.0019260	1801.8	3.9777	.0019775	1826.5	4.0149	.0020370	1853.9	4.0561	.0021088
SAT.VAP	2470.6	5.0332	.00668	2446.0	4.9893	.00628	2418.4	4.9412	.00588	2386.4	4.8869	.00546
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3571.6	6.5669	.019544	3567.3	6.5511	.018993	3563.0	6.5356	.018470	3558.7	6.5204	.017973
620	3598.6	6.5972	.019861	3594.4	6.5816	.019304	3590.3	6.5663	.018776	3586.1	6.5512	.018273
630	3625.4	6.6271	.020174	3621.4	6.6116	.019612	3617.4	6.5965	.019077	3613.3	6.5816	.018569
640	3652.1	6.6564	.020485	3648.2	6.6411	.019916	3644.3	6.6261	.019376	3640.4	6.6114	.018862
650	3678.6	6.6854	.020792	3674.9	6.6702	.020218	3671.1	6.6554	.019672	3667.4	6.6408	.019153
660	3705.1	6.7139	.021097	3701.5	6.6989	.020516	3697.9	6.6841	.019965	3694.2	6.6697	.019440
670	3731.5	6.7420	.021399	3728.0	6.7271	.020812	3724.5	6.7125	.020255	3721.0	6.6982	.019725
680	3757.8	6.7697	.021699	3754.4	6.7550	.021106	3751.0	6.7405	.020543	3747.6	6.7263	.020007
690	3784.0	6.7971	.021996	3780.7	6.7824	.021397	3777.4	6.7681	.020828	3774.2	6.7540	.020287
700	3810.2	6.8241	.022291	3807.0	6.8096	.021686	3803.8	6.7953	.021111	3800.6	6.7814	.020565
710	3836.3	6.8508	.022585	3833.2	6.8364	.021973	3830.1	6.8222	.021393	3827.1	6.8084	.020840
720	3862.4	6.8772	.022876	3859.4	6.8629	.022258	3856.4	6.8488	.021672	3853.4	6.8350	.021114
730	3888.4	6.9033	.023165	3885.5	6.8891	.022542	3882.6	6.8751	.021949	3879.7	6.8614	.021386
740	3914.4	6.9291	.023453	3911.6	6.9149	.022823	3908.8	6.9011	.022225	3906.0	6.8875	.021656
750	3940.4	6.9546	.023739	3937.7	6.9405	.023103	3935.0	6.9267	.022499	3932.2	6.9132	.021924
760	3966.3	6.9799	.024023	3963.7	6.9659	.023381	3961.1	6.9521	.022771	3958.4	6.9387	.022191
770	3992.3	7.0049	.024306	3989.7	6.9909	.023658	3987.2	6.9773	.023042	3984.6	6.9639	.022456
780	4018.2	7.0296	.024587	4015.7	7.0157	.023933	4013.2	7.0021	.023311	4010.7	6.9888	.022720
790	4044.1	7.0540	.024867	4041.7	7.0402	.024206	4039.3	7.0267	.023579	4036.8	7.0135	.022982
800	4070.0	7.0783	.025146	4067.6	7.0645	.024479	4065.3	7.0511	.023845	4062.9	7.0380	.023243

TABLE 3 WATER AND STEAM

p(MPa)	= 21.000			= 21.500			= 22.000			= 22.100		
SAT t(°C)	369.78			371.76			373.69			374.07		
SAT.LIQ	1886.3	4.1048	.0022015	1928.9	4.1693	.0023401	2011.1	4.2947	.0026714	2062.9	4.3742	.0029258
SAT.VAP	2347.6	4.8223	.00502	2295.2	4.7372	.00451	2195.6	4.5799	.00373	2141.5	4.4957	.00337
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	21.1	.0009	.0009900	21.6	.0009	.0009897	22.1	.0009	.0009895	22.2	.0009	.0009894
10	62.3	.1488	.0009906	62.7	.1487	.0009904	63.2	.1486	.0009901	63.3	.1486	.0009901
20	103.4	.2917	.0009924	103.9	.2916	.0009922	104.4	.2914	.0009920	104.5	.2914	.0009920
30	144.7	.4300	.0009952	145.1	.4298	.0009950	145.6	.4296	.0009948	145.7	.4296	.0009947
40	185.9	.5639	.0009988	186.4	.5637	.0009985	186.8	.5635	.0009983	186.9	.5635	.0009983
50	227.3	.6938	.0010030	227.7	.6936	.0010028	228.1	.6934	.0010026	228.2	.6933	.0010025
60	268.6	.8199	.0010079	269.1	.8196	.0010077	269.5	.8194	.0010075	269.6	.8193	.0010074
70	310.1	.9424	.0010134	310.5	.9422	.0010132	310.9	.9419	.0010129	311.0	.9418	.0010129
80	351.6	1.0616	.0010194	352.0	1.0613	.0010192	352.4	1.0610	.0010190	352.4	1.0609	.0010189
90	393.1	1.1777	.0010260	393.5	1.1774	.0010258	393.9	1.1770	.0010256	394.0	1.1770	.0010255
100	434.8	1.2909	.0010332	435.2	1.2905	.0010330	435.6	1.2902	.0010327	435.6	1.2901	.0010327
110	476.6	1.4014	.0010409	476.9	1.4010	.0010406	477.3	1.4006	.0010404	477.4	1.4005	.0010403
120	518.5	1.5093	.0010491	518.8	1.5089	.0010489	519.2	1.5084	.0010486	519.2	1.5083	.0010485
130	560.5	1.6149	.0010579	560.8	1.6144	.0010576	561.2	1.6140	.0010574	561.3	1.6139	.0010573
140	602.7	1.7183	.0010673	603.0	1.7178	.0010670	603.4	1.7173	.0010667	603.4	1.7172	.0010667
150	645.1	1.8196	.0010773	645.4	1.8191	.0010770	645.7	1.8186	.0010767	645.8	1.8185	.0010766
160	687.7	1.9192	.0010879	688.0	1.9186	.0010876	688.3	1.9181	.0010872	688.4	1.9180	.0010872
170	730.6	2.0170	.0010992	730.8	2.0164	.0010989	731.1	2.0158	.0010985	731.2	2.0157	.0010984
180	773.7	2.1132	.0011113	774.0	2.1126	.0011109	774.2	2.1120	.0011105	774.3	2.1118	.0011104
190	817.1	2.2080	.0011241	817.4	2.2074	.0011237	817.6	2.2067	.0011233	817.7	2.2066	.0011232
200	860.9	2.3015	.0011378	861.1	2.3008	.0011374	861.4	2.3001	.0011369	861.4	2.3000	.0011368
210	905.1	2.3939	.0011525	905.3	2.3932	.0011520	905.5	2.3924	.0011515	905.5	2.3923	.0011514
220	949.7	2.4853	.0011682	949.9	2.4845	.0011677	950.0	2.4837	.0011671	950.1	2.4835	.0011670
230	994.8	2.5759	.0011851	994.9	2.5750	.0011845	995.1	2.5741	.0011840	995.1	2.5740	.0011838
240	1040.5	2.6658	.0012034	1040.6	2.6649	.0012028	1040.7	2.6639	.0012021	1040.7	2.6637	.0012020
250	1086.9	2.7553	.0012233	1086.9	2.7543	.0012225	1087.0	2.7532	.0012218	1087.0	2.7530	.0012217
260	1134.0	2.8445	.0012449	1134.0	2.8434	.0012441	1134.0	2.8423	.0012432	1134.0	2.8421	.0012431
270	1182.0	2.9338	.0012686	1182.0	2.9326	.0012677	1182.0	2.9313	.0012667	1182.0	2.9311	.0012665
280	1231.2	3.0234	.0012949	1231.0	3.0220	.0012938	1230.9	3.0207	.0012927	1230.9	3.0204	.0012925
290	1281.6	3.1138	.0013242	1281.4	3.1122	.0013229	1281.2	3.1107	.0013216	1281.1	3.1104	.0013214
300	1333.6	3.2053	.0013574	1333.2	3.2035	.0013558	1332.9	3.2018	.0013543	1332.9	3.2014	.0013540

TABLE 3 WATER AND STEAM

p(MPa)	= 21.000			= 21.500			= 22.000			= 22.100		
SAT t(°C)	369.78			371.76			373.69			374.07		
SAT.LIQ	1886.3	4.1048	.0022015	1928.9	4.1693	.0023401	2011.1	4.2947	.0026714	2062.9	4.3742	.0029258
SAT.VAP	2347.6	4.8223	.00502	2295.2	4.7372	.00451	2195.6	4.5799	.00373	2141.5	4.4957	.00337
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1387.6	3.2987	.0013955	1387.1	3.2966	.0013935	1386.6	3.2946	.0013916	1386.5	3.2942	.0013912
320	1444.2	3.3949	.0014400	1443.5	3.3925	.0014376	1442.8	3.3901	.0014351	1442.6	3.3896	.0014347
330	1504.2	3.4953	.0014936	1503.2	3.4924	.0014904	1502.2	3.4895	.0014872	1502.0	3.4889	.0014866
340	1569.2	3.6022	.0015607	1567.7	3.5984	.0015561	1566.2	3.5947	.0015516	1565.9	3.5940	.0015507
350	1641.9	3.7197	.0016503	1639.5	3.7145	.0016430	1637.2	3.7095	.0016361	1636.7	3.7085	.0016347
360	1731.4	3.8625	.0017908	1726.5	3.8533	.0017756	1722.0	3.8449	.0017619	1721.2	3.8432	.0017592
370	2362.0	4.8447	.0051419	1861.2	4.0642	.0021013	1842.3	4.0333	.0020326	1839.3	4.0283	.0020219
380	2592.8	5.2015	.0072076	2552.1	5.1338	.0066725	2504.4	5.0559	.0061105	2493.7	5.0385	.0059927
390	2700.5	5.3652	.0082572	2674.0	5.3192	.0078125	2645.9	5.2711	.0073771	2640.1	5.2612	.0072910
400	2781.3	5.4863	.0090714	2760.5	5.4487	.0086549	2738.8	5.4102	.0082510	2734.3	5.4023	.0081716
410	2847.6	5.5840	.0097577	2830.4	5.5518	.0093562	2812.6	5.5190	.0089689	2808.9	5.5124	.0088930
420	2904.5	5.6667	.010360	2889.7	5.6381	.0099667	2874.6	5.6091	.0095883	2871.5	5.6033	.0095143
430	2955.0	5.7391	.010904	2942.0	5.7130	.010515	2928.8	5.6868	.010141	2926.1	5.6815	.010068
440	3001.0	5.8040	.011405	2989.3	5.7798	.011017	2977.5	5.7556	.010645	2975.1	5.7508	.010572
450	3043.6	5.8633	.011874	3033.0	5.8406	.011485	3022.3	5.8179	.011113	3020.1	5.8134	.011040
460	3083.6	5.9182	.012316	3073.9	5.8967	.011926	3064.0	5.8753	.011552	3062.0	5.8710	.011479
470	3121.5	5.9697	.012738	3112.5	5.9491	.012345	3103.4	5.9287	.011969	3101.6	5.9246	.011896
480	3157.8	6.0182	.013142	3149.5	5.9985	.012746	3141.0	5.9789	.012368	3139.3	5.9750	.012294
490	3192.8	6.0643	.013531	3184.9	6.0452	.013131	3177.0	6.0264	.012750	3175.4	6.0226	.012676
500	3226.5	6.1082	.013907	3219.2	6.0898	.013504	3211.7	6.0716	.013119	3210.2	6.0680	.013044
510	3259.3	6.1503	.014271	3252.3	6.1325	.013864	3245.3	6.1148	.013476	3243.9	6.1113	.013400
520	3291.2	6.1908	.014625	3284.6	6.1734	.014215	3278.0	6.1563	.013822	3276.7	6.1529	.013746
530	3322.4	6.2299	.014970	3316.2	6.2129	.014556	3309.9	6.1962	.014159	3308.6	6.1929	.014082
540	3352.9	6.2677	.015308	3347.0	6.2511	.014888	3341.0	6.2347	.014488	3339.9	6.2315	.014410
550	3382.9	6.3043	.015638	3377.2	6.2881	.015214	3371.6	6.2721	.014810	3370.4	6.2689	.014731
560	3412.4	6.3399	.015961	3407.0	6.3240	.015533	3401.6	6.3083	.015124	3400.5	6.3052	.015045
570	3441.4	6.3745	.016279	3436.3	6.3589	.015846	3431.1	6.3435	.015433	3430.1	6.3405	.015352
580	3470.1	6.4084	.016591	3465.2	6.3930	.016153	3460.2	6.3779	.015736	3459.2	6.3749	.015655
590	3498.4	6.4414	.016898	3493.7	6.4263	.016456	3489.0	6.4114	.016034	3488.0	6.4084	.015952
600	3526.5	6.4737	.017201	3522.0	6.4588	.016754	3517.4	6.4441	.016327	3516.5	6.4412	.016244

ABLE 3 WATER AND STEAM

	p(MPa) = 21.000			= 21.500			= 22.000			= 22.100		
SAT t(°C)	369.78			371.76			373.69			374.07		
SAT.LIQ	1886.3	4.1048	.0022015	1928.9	4.1693	.0023401	2011.1	4.2947	.0026714	2062.9	4.3742	.0029258
SAT.VAP	2347.6	4.8223	.00502	2295.2	4.7372	.00451	2195.6	4.5799	.00373	2141.5	4.4957	.00337
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3554.3	6.5054	.017499	3550.0	6.4907	.017047	3545.6	6.4762	.016616	3544.7	6.4733	.016532
620	3581.9	6.5365	.017794	3577.7	6.5219	.017337	3573.5	6.5076	.016902	3572.7	6.5048	.016817
630	3609.3	6.5670	.018085	3605.3	6.5526	.017624	3601.2	6.5385	.017183	3600.4	6.5357	.017098
640	3636.6	6.5970	.018373	3632.7	6.5828	.017907	3628.7	6.5688	.017462	3628.0	6.5660	.017375
650	3663.6	6.6265	.018658	3659.9	6.6124	.018187	3656.1	6.5986	.017737	3655.4	6.5959	.017650
660	3690.6	6.6555	.018940	3687.0	6.6416	.018464	3683.3	6.6279	.018010	3682.6	6.6252	.017921
670	3717.5	6.6841	.019220	3713.9	6.6704	.018739	3710.4	6.6568	.018279	3709.7	6.6541	.018190
680	3744.2	6.7124	.019497	3740.8	6.6987	.019011	3737.4	6.6853	.018547	3736.7	6.6826	.018456
690	3770.9	6.7402	.019772	3767.6	6.7266	.019280	3764.3	6.7133	.018811	3763.6	6.7107	.018720
700	3797.5	6.7677	.020044	3794.3	6.7542	.019548	3791.1	6.7410	.019074	3790.4	6.7384	.018982
710	3824.0	6.7948	.020314	3820.9	6.7814	.019813	3817.8	6.7683	.019335	3817.2	6.7657	.019241
720	3850.4	6.8215	.020583	3847.4	6.8083	.020076	3844.5	6.7953	.019593	3843.9	6.7927	.019499
730	3876.8	6.8480	.020849	3873.9	6.8348	.020338	3871.0	6.8219	.019850	3870.5	6.8194	.019755
740	3903.2	6.8741	.021114	3900.4	6.8611	.020597	3897.6	6.8483	.020104	3897.0	6.8457	.020008
750	3929.5	6.9000	.021377	3926.8	6.8870	.020855	3924.1	6.8743	.020357	3923.5	6.8718	.020261
760	3955.8	6.9255	.021638	3953.1	6.9126	.021112	3950.5	6.9000	.020609	3950.0	6.8975	.020511
770	3982.0	6.9508	.021898	3979.5	6.9380	.021366	3976.9	6.9254	.020859	3976.4	6.9229	.020760
780	4008.2	6.9758	.022156	4005.8	6.9631	.021619	4003.3	6.9506	.021107	4002.8	6.9481	.021007
790	4034.4	7.0006	.022413	4032.0	6.9879	.021871	4029.6	6.9755	.021354	4029.1	6.9730	.021253
800	4060.6	7.0251	.022669	4058.3	7.0125	.022122	4055.9	7.0001	.021599	4055.5	6.9977	.021498

TABLE 3 WATER AND STEAM

p(MPa)	= 23.000			= 24.000			= 25.000			= 26.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	23.1	.0009	.0009890	24.1	.0009	.0009885	25.1	.0009	.0009881	26.1	.0009	.0009876
10	64.2	.1485	.0009897	65.1	.1484	.0009893	66.1	.1482	.0009888	67.0	.1481	.0009884
20	105.3	.2912	.0009916	106.2	.2910	.0009911	107.1	.2907	.0009907	108.1	.2905	.0009903
30	146.5	.4293	.0009944	147.4	.4290	.0009939	148.3	.4287	.0009935	149.2	.4284	.0009931
40	187.7	.5631	.0009979	188.6	.5627	.0009975	189.4	.5623	.0009971	190.3	.5620	.0009967
50	229.0	.6929	.0010022	229.8	.6924	.0010018	230.7	.6920	.0010013	231.5	.6915	.0010009
60	270.3	.8189	.0010070	271.1	.8184	.0010066	272.0	.8178	.0010062	272.8	.8173	.0010058
70	311.7	.9413	.0010125	312.5	.9407	.0010121	313.3	.9401	.0010116	314.1	.9396	.0010112
80	353.2	1.0604	.0010185	354.0	1.0598	.0010181	354.8	1.0591	.0010177	355.6	1.0585	.0010172
90	394.7	1.1764	.0010251	395.5	1.1757	.0010247	396.2	1.1750	.0010242	397.0	1.1743	.0010237
100	436.3	1.2894	.0010322	437.1	1.2887	.0010318	437.8	1.2879	.0010313	438.6	1.2872	.0010308
110	478.0	1.3998	.0010399	478.8	1.3990	.0010394	479.5	1.3982	.0010389	480.3	1.3974	.0010384
120	519.9	1.5076	.0010481	520.6	1.5067	.0010476	521.3	1.5059	.0010470	522.0	1.5051	.0010465
130	561.9	1.6130	.0010568	562.6	1.6121	.0010563	563.3	1.6112	.0010557	564.0	1.6104	.0010552
140	604.0	1.7163	.0010661	604.7	1.7154	.0010656	605.4	1.7144	.0010650	606.0	1.7135	.0010644
150	646.4	1.8176	.0010760	647.0	1.8166	.0010754	647.7	1.8156	.0010748	648.3	1.8145	.0010742
160	688.9	1.9170	.0010866	689.5	1.9159	.0010859	690.2	1.9148	.0010853	690.8	1.9137	.0010846
170	731.7	2.0147	.0010978	732.3	2.0135	.0010971	732.9	2.0124	.0010964	733.5	2.0112	.0010957
180	774.8	2.1107	.0011097	775.3	2.1095	.0011090	775.9	2.1083	.0011083	776.4	2.1071	.0011075
190	818.1	2.2054	.0011225	818.7	2.2041	.0011217	819.2	2.2028	.0011209	819.7	2.2015	.0011201
200	861.8	2.2987	.0011360	862.3	2.2973	.0011352	862.8	2.2959	.0011343	863.3	2.2945	.0011334
210	905.9	2.3909	.0011505	906.3	2.3894	.0011496	906.8	2.3879	.0011487	907.2	2.3864	.0011477
220	950.4	2.4821	.0011661	950.8	2.4805	.0011651	951.2	2.4789	.0011640	951.5	2.4773	.0011630
230	995.4	2.5724	.0011828	995.7	2.5707	.0011817	996.0	2.5689	.0011805	996.4	2.5672	.0011794
240	1041.0	2.6620	.0012008	1041.2	2.6602	.0011996	1041.4	2.6583	.0011983	1041.7	2.6565	.0011970
250	1087.2	2.7512	.0012204	1087.3	2.7492	.0012189	1087.5	2.7472	.0012175	1087.7	2.7452	.0012161
260	1134.1	2.8401	.0012416	1134.2	2.8379	.0012400	1134.2	2.8357	.0012384	1134.3	2.8335	.0012368
270	1181.9	2.9289	.0012649	1181.8	2.9265	.0012630	1181.8	2.9241	.0012612	1181.8	2.9217	.0012594
280	1230.7	3.0180	.0012905	1230.5	3.0153	.0012884	1230.3	3.0126	.0012863	1230.2	3.0100	.0012842
290	1280.8	3.1076	.0013191	1280.4	3.1046	.0013166	1280.0	3.1017	.0013141	1279.7	3.0987	.0013117
300	1332.3	3.1983	.0013512	1331.7	3.1949	.0013482	1331.1	3.1916	.0013453	1330.6	3.1883	.0013424

TABLE 3 WATER AND STEAM

	p(MPa) = 23.000			= 24.000			= 25.000			= 26.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1385.7	3.2907	.0013879	1384.8	3.2868	.0013842	1383.9	3.2829	.0013807	1383.1	3.2792	.0013772
320	1441.4	3.3854	.0014304	1440.1	3.3809	.0014259	1438.9	3.3764	.0014214	1437.8	3.3721	.0014171
330	1500.3	3.4838	.0014810	1498.5	3.4783	.0014751	1496.7	3.4730	.0014694	1495.1	3.4679	.0014639
340	1563.4	3.5876	.0015431	1560.8	3.5808	.0015350	1558.3	3.5743	.0015273	1555.9	3.5679	.0015200
350	1632.8	3.6999	.0016231	1628.8	3.6909	.0016111	1625.1	3.6824	.0016000	1621.7	3.6744	.0015896
360	1714.1	3.8296	.0017376	1707.2	3.8159	.0017166	1701.1	3.8036	.0016981	1695.6	3.7923	.0016815
370	1818.1	3.9926	.0019486	1801.6	3.9638	.0018935	1788.8	3.9411	.0018522	1778.4	3.9220	.0018190
380	2362.5	4.8302	.0047469	2044.0	4.3370	.0026917	1941.0	4.1757	.0022403	1903.0	4.1141	.0020967
390	2581.3	5.1632	.0065057	2500.5	5.0322	.0056029	2391.3	4.8599	.0046095	2241.2	4.6274	.0035338
400	2692.3	5.3294	.0074763	2641.2	5.2430	.0067392	2582.0	5.1455	.0060138	2511.7	5.0326	.0052813
410	2775.0	5.4515	.0082322	2734.7	5.3809	.0075401	2691.3	5.3069	.0068866	2644.6	5.2289	.0062668
420	2843.0	5.5502	.0088723	2809.5	5.4896	.0082048	2774.1	5.4271	.0075795	2736.5	5.3624	.0069916
430	2901.3	5.6338	.0094355	2872.6	5.5801	.0087814	2842.5	5.5252	.0081720	2811.0	5.4692	.0076020
440	2953.2	5.7070	.0099444	2927.9	5.6581	.0092971	2901.7	5.6087	.0086960	2874.4	5.5587	.0081360
450	3000.3	5.7727	.010413	2977.7	5.7275	.0097683	2954.3	5.6821	.0091711	2930.2	5.6364	.0086160
460	3044.0	5.8327	.010851	3023.4	5.7903	.010206	3002.3	5.7479	.0096094	2980.6	5.7056	.0090559
470	3085.0	5.8882	.011265	3066.1	5.8481	.010617	3046.7	5.8082	.010019	3027.0	5.7685	.0094653
480	3123.8	5.9402	.011659	3106.3	5.9019	.011007	3088.5	5.8640	.010407	3070.3	5.8264	.0098504
490	3161.0	5.9892	.012036	3144.7	5.9525	.011380	3128.1	5.9162	.010775	3111.2	5.8804	.010216
500	3196.7	6.0357	.012399	3181.4	6.0003	.011737	3165.9	5.9655	.011128	3150.2	5.9311	.010565
510	3231.2	6.0800	.012749	3216.9	6.0458	.012082	3202.3	6.0122	.011467	3187.6	5.9792	.010900
520	3264.7	6.1225	.013088	3251.1	6.0893	.012415	3237.5	6.0568	.011795	3223.6	6.0249	.011222
530	3297.2	6.1633	.013418	3284.5	6.1311	.012738	3271.5	6.0995	.012113	3258.5	6.0685	.011534
540	3329.0	6.2026	.013740	3316.9	6.1713	.013053	3304.7	6.1405	.012421	3292.3	6.1104	.011837
550	3360.2	6.2407	.014053	3348.7	6.2101	.013359	3337.0	6.1801	.012721	3325.3	6.1508	.012132
560	3390.7	6.2776	.014360	3379.7	6.2476	.013659	3368.7	6.2183	.013014	3357.5	6.1897	.012418
570	3420.7	6.3134	.014660	3410.3	6.2840	.013952	3399.7	6.2553	.013300	3389.1	6.2273	.012699
580	3450.3	6.3482	.014955	3440.3	6.3194	.014239	3430.2	6.2913	.013581	3420.1	6.2639	.012973
590	3479.5	6.3822	.015245	3469.9	6.3539	.014521	3460.3	6.3263	.013856	3450.6	6.2994	.013241
600	3508.3	6.4154	.015530	3499.1	6.3876	.014798	3489.9	6.3604	.014126	3480.6	6.3340	.013505

TABLE 3 WATER AND STEAM

p(MPa)	= 23.000			= 24.000			= 25.000			= 26.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3536.8	6.4479	.015810	3528.0	6.4205	.015071	3519.1	6.3938	.014391	3510.2	6.3677	.013764
620	3565.1	6.4797	.016087	3556.6	6.4527	.015340	3548.1	6.4263	.014653	3539.5	6.4007	.014019
630	3593.1	6.5109	.016360	3584.9	6.4842	.015605	3576.7	6.4583	.014911	3568.5	6.4330	.014270
640	3620.9	6.5416	.016630	3613.1	6.5152	.015867	3605.2	6.4896	.015165	3597.2	6.4646	.014518
650	3648.6	6.5717	.016896	3641.0	6.5456	.016125	3633.4	6.5203	.015416	3625.7	6.4957	.014762
660	3676.0	6.6013	.017160	3668.7	6.5755	.016381	3661.4	6.5504	.015664	3654.0	6.5261	.015003
670	3703.4	6.6304	.017421	3696.3	6.6049	.016633	3689.2	6.5801	.015910	3682.1	6.5561	.015241
680	3730.6	6.6591	.017679	3723.8	6.6338	.016884	3716.9	6.6093	.016152	3710.0	6.5855	.015477
690	3757.7	6.6874	.017935	3751.1	6.6624	.017131	3744.5	6.6381	.016392	3737.8	6.6145	.015711
700	3784.7	6.7153	.018188	3778.3	6.6905	.017377	3771.9	6.6664	.016630	3765.5	6.6431	.015941
710	3811.6	6.7428	.018440	3805.4	6.7182	.017620	3799.2	6.6944	.016866	3793.0	6.6713	.016170
720	3838.5	6.7700	.018689	3832.5	6.7456	.017861	3826.5	6.7219	.017100	3820.5	6.6990	.016397
730	3865.2	6.7968	.018937	3859.4	6.7726	.018101	3853.6	6.7491	.017331	3847.8	6.7264	.016622
740	3892.0	6.8233	.019183	3886.3	6.7993	.018338	3880.7	6.7760	.017561	3875.1	6.7534	.016844
750	3918.6	6.8495	.019427	3913.2	6.8256	.018574	3907.7	6.8025	.017789	3902.2	6.7801	.017066
760	3945.2	6.8754	.019669	3939.9	6.8517	.018808	3934.6	6.8287	.018016	3929.3	6.8065	.017285
770	3971.8	6.9010	.019910	3966.7	6.8774	.019040	3961.5	6.8546	.018241	3956.4	6.8326	.017503
780	3998.3	6.9263	.020149	3993.3	6.9029	.019271	3988.4	6.8802	.018464	3983.4	6.8583	.017719
790	4024.8	6.9513	.020387	4020.0	6.9280	.019501	4015.1	6.9055	.018686	4010.3	6.8838	.017934
800	4051.2	6.9761	.020623	4046.6	6.9529	.019729	4041.9	6.9306	.018906	4037.2	6.9090	.018147

TABLE 3 WATER AND STEAM

p(MPa)	= 27.000			= 28.000			= 29.000			= 30.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	27.1	.0009	.0009871	28.0	.0008	.0009867	29.0	.0008	.0009862	30.0	.0008	.0009857
10	68.0	.1479	.0009879	68.9	.1478	.0009875	69.9	.1477	.0009870	70.8	.1475	.0009866
20	109.0	.2902	.0009899	109.9	.2900	.0009895	110.8	.2898	.0009890	111.7	.2895	.0009886
30	150.0	.4280	.0009927	150.9	.4277	.0009923	151.8	.4274	.0009919	152.7	.4271	.0009915
40	191.2	.5616	.0009963	192.1	.5612	.0009959	192.9	.5608	.0009955	193.8	.5604	.0009951
50	232.4	.6911	.0010005	233.2	.6906	.0010001	234.1	.6902	.0009997	235.0	.6897	.0009993
60	273.6	.8168	.0010054	274.5	.8163	.0010049	275.3	.8158	.0010045	276.1	.8153	.0010041
70	315.0	.9390	.0010108	315.8	.9384	.0010104	316.6	.9379	.0010099	317.4	.9373	.0010095
80	356.3	1.0579	.0010168	357.1	1.0572	.0010163	357.9	1.0566	.0010159	358.7	1.0560	.0010155
90	397.8	1.1736	.0010233	398.6	1.1730	.0010228	399.4	1.1723	.0010224	400.1	1.1716	.0010219
100	439.3	1.2865	.0010303	440.1	1.2858	.0010299	440.9	1.2850	.0010294	441.5	1.2843	.0010289
110	481.0	1.3966	.0010379	481.7	1.3958	.0010374	482.5	1.3951	.0010369	483.2	1.3943	.0010364
120	522.8	1.5042	.0010460	523.5	1.5034	.0010455	524.2	1.5025	.0010450	524.9	1.5017	.0010445
130	564.7	1.6095	.0010546	565.4	1.6086	.0010541	566.0	1.6077	.0010536	566.7	1.6068	.0010530
140	606.7	1.7125	.0010638	607.4	1.7116	.0010633	608.1	1.7106	.0010627	608.7	1.7097	.0010621
150	649.0	1.8135	.0010736	649.6	1.8125	.0010730	650.3	1.8115	.0010724	650.9	1.8105	.0010718
160	691.4	1.9127	.0010840	692.0	1.9116	.0010834	692.6	1.9105	.0010827	693.3	1.9095	.0010821
170	734.1	2.0101	.0010950	734.7	2.0089	.0010944	735.3	2.0078	.0010937	735.9	2.0067	.0010930
180	777.0	2.1059	.0011068	777.6	2.1046	.0011060	778.1	2.1034	.0011053	778.7	2.1022	.0011046
190	820.2	2.2002	.0011193	820.7	2.1989	.0011185	821.3	2.1976	.0011177	821.8	2.1963	.0011169
200	863.7	2.2932	.0011326	864.2	2.2918	.0011317	864.7	2.2904	.0011309	865.2	2.2891	.0011301
210	907.6	2.3850	.0011468	908.1	2.3835	.0011459	908.5	2.3820	.0011450	909.0	2.3806	.0011440
220	951.9	2.4757	.0011620	952.3	2.4741	.0011610	952.7	2.4726	.0011600	953.1	2.4710	.0011590
230	996.7	2.5655	.0011783	997.0	2.5639	.0011772	997.4	2.5622	.0011761	997.7	2.5605	.0011750
240	1042.0	2.6547	.0011958	1042.2	2.6528	.0011946	1042.5	2.6510	.0011934	1042.8	2.6492	.0011922
250	1087.8	2.7432	.0012147	1088.0	2.7412	.0012134	1088.2	2.7393	.0012120	1088.4	2.7373	.0012107
260	1134.4	2.8313	.0012353	1134.5	2.8292	.0012337	1134.6	2.8271	.0012322	1134.7	2.8250	.0012307
270	1181.7	2.9193	.0012576	1181.7	2.9170	.0012559	1181.7	2.9147	.0012542	1181.8	2.9124	.0012525
280	1230.0	3.0074	.0012822	1229.9	3.0048	.0012802	1229.8	3.0023	.0012782	1229.7	2.9998	.0012763
290	1279.4	3.0959	.0013093	1279.1	3.0930	.0013070	1278.8	3.0902	.0013047	1278.6	3.0874	.0013025
300	1330.1	3.1851	.0013396	1329.6	3.1819	.0013369	1329.1	3.1787	.0013342	1328.7	3.1757	.0013316

TABLE 3 WATER AND STEAM

	p(MPa) = 27.000			= 28.000			= 29.000			= 30.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1382.4	3.2755	.0013738	1381.6	3.2719	.0013705	1380.9	3.2683	.0013673	1380.3	3.2648	.0013642
320	1436.7	3.3678	.0014130	1435.6	3.3636	.0014089	1434.6	3.3596	.0014050	1433.6	3.3556	.0014012
330	1493.5	3.4628	.0014586	1492.0	3.4580	.0014535	1490.6	3.4532	.0014486	1489.2	3.4485	.0014438
340	1553.7	3.5619	.0015130	1551.6	3.5560	.0015064	1549.6	3.5503	.0015000	1547.7	3.5447	.0014939
350	1618.5	3.6667	.0015799	1615.5	3.6593	.0015708	1612.7	3.6523	.0015622	1610.0	3.6455	.0015540
360	1690.6	3.7818	.0016665	1686.1	3.7720	.0016528	1681.9	3.7628	.0016402	1678.0	3.7541	.0016285
370	1769.6	3.9055	.0017912	1761.9	3.8908	.0017673	1755.1	3.8774	.0017463	1749.0	3.8653	.0017275
380	1879.5	4.0750	.0020134	1862.4	4.0458	.0019550	1848.9	4.0221	.0019101	1837.7	4.0021	.0018737
390	2109.4	4.4239	.0027920	2032.6	4.3041	.0024359	1988.3	4.2338	.0022544	1959.1	4.1865	.0021438
400	2427.5	4.9003	.0045389	2330.7	4.7503	.0038219	2237.0	4.6059	.0032355	2161.8	4.4896	.0028306
410	2592.2	5.1434	.0056653	2532.2	5.0477	.0050692	2465.6	4.9431	.0044923	2394.5	4.8329	.0039561
420	2696.6	5.2952	.0064369	2654.3	5.2253	.0059125	2609.0	5.1517	.0054126	2557.9	5.0705	.0049214
430	2777.9	5.4117	.0070671	2743.2	5.3526	.0065640	2706.9	5.2919	.0060899	2668.8	5.2295	.0056427
440	2846.0	5.5079	.0076125	2816.5	5.4562	.0071217	2785.9	5.4035	.0066607	2754.0	5.3499	.0062270
450	2905.3	5.5904	.0080984	2879.6	5.5440	.0076145	2853.0	5.4970	.0071610	2825.6	5.4495	.0067353
460	2958.3	5.6632	.0085409	2935.4	5.6207	.0080603	2911.9	5.5779	.0076106	2887.7	5.5349	.0071891
470	3006.8	5.7289	.0089504	2986.1	5.6893	.0084705	2964.9	5.6498	.0080222	2943.3	5.6102	.0076025
480	3051.8	5.7890	.0093340	3032.9	5.7519	.0088533	3013.6	5.7148	.0084046	2993.9	5.6779	.0079849
490	3094.1	5.8449	.0096968	3076.6	5.8096	.0092140	3058.9	5.7746	.0087637	3040.9	5.7398	.0083428
500	3134.2	5.8972	.010042	3118.1	5.8636	.0095566	3101.6	5.8302	.0091038	3085.0	5.7972	.0086808
510	3172.7	5.9465	.010373	3157.5	5.9143	.0098839	3142.2	5.8824	.0094281	3126.7	5.8508	.0090023
520	3209.6	5.9934	.010691	3195.4	5.9623	.010198	3181.1	5.9317	.0097388	3166.6	5.9014	.0093098
530	3245.2	6.0381	.010999	3231.9	6.0081	.010501	3218.4	5.9785	.010038	3204.8	5.9493	.0096052
540	3279.8	6.0809	.011296	3267.2	6.0518	.010794	3254.5	6.0231	.010327	3241.7	5.9949	.0098901
550	3313.5	6.1220	.011586	3301.5	6.0937	.011078	3289.5	6.0659	.010606	3277.4	6.0386	.010166
560	3346.3	6.1616	.011867	3335.0	6.1341	.011355	3323.6	6.1071	.010878	3312.1	6.0805	.010433
570	3378.4	6.1999	.012141	3367.6	6.1731	.011624	3356.8	6.1467	.011143	3345.9	6.1208	.010693
580	3409.9	6.2370	.012410	3399.6	6.2108	.011887	3389.3	6.1850	.011401	3378.9	6.1597	.010947
590	3440.8	6.2731	.012673	3431.0	6.2474	.012144	3421.1	6.2221	.011653	3411.2	6.1974	.011194
600	3471.3	6.3082	.012930	3461.9	6.2829	.012397	3452.5	6.2582	.011900	3443.0	6.2340	.011436

TABLE 3 WATER AND STEAM

	p(MPa) = 27.000			= 28.000			= 29.000			= 30.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3501.3	6.3424	.013183	3492.3	6.3176	.012644	3483.3	6.2933	.012142	3474.2	6.2696	.011674
620	3530.9	6.3757	.013432	3522.3	6.3514	.012887	3513.7	6.3275	.012380	3505.0	6.3042	.011907
630	3560.3	6.4084	.013677	3552.0	6.3844	.013126	3543.7	6.3609	.012614	3535.3	6.3380	.012135
640	3589.3	6.4404	.013918	3581.3	6.4167	.013362	3573.3	6.3936	.012844	3565.3	6.3710	.012361
650	3618.1	6.4717	.014156	3610.4	6.4484	.013594	3602.7	6.4256	.013070	3595.0	6.4033	.012582
660	3646.6	6.5025	.014391	3639.2	6.4794	.013823	3631.8	6.4569	.013294	3624.4	6.4350	.012801
670	3675.0	6.5327	.014623	3667.8	6.5099	.014049	3660.7	6.4877	.013515	3653.5	6.4661	.013016
680	3703.2	6.5624	.014852	3696.3	6.5399	.014272	3689.4	6.5180	.013733	3682.4	6.4966	.013229
690	3731.2	6.5916	.015079	3724.5	6.5694	.014493	3717.8	6.5477	.013948	3711.2	6.5265	.013439
700	3759.0	6.6204	.015304	3752.6	6.5984	.014712	3746.2	6.5769	.014161	3739.7	6.5560	.013647
710	3786.8	6.6488	.015526	3780.6	6.6270	.014928	3774.3	6.6057	.014372	3768.1	6.5850	.013852
720	3814.4	6.6768	.015746	3808.4	6.6552	.015142	3802.4	6.6341	.014580	3796.3	6.6136	.014056
730	3842.0	6.7044	.015965	3836.1	6.6829	.015355	3830.3	6.6621	.014787	3824.4	6.6418	.014257
740	3869.4	6.7316	.016181	3863.8	6.7103	.015565	3858.1	6.6897	.014992	3852.4	6.6696	.014457
750	3896.8	6.7585	.016395	3891.3	6.7374	.015773	3885.8	6.7169	.015195	3880.3	6.6970	.014654
760	3924.0	6.7850	.016604	3918.7	6.7641	.015980	3913.4	6.7438	.015396	3908.1	6.7240	.014850
770	3951.3	6.8112	.016820	3946.1	6.7905	.016186	3941.0	6.7703	.015595	3935.8	6.7507	.015045
780	3978.4	6.8371	.017029	3973.4	6.8165	.016389	3968.4	6.7965	.015793	3963.5	6.7770	.015237
790	4005.5	6.8627	.017238	4000.7	6.8423	.016591	3995.8	6.8224	.015990	3991.0	6.8031	.015429
800	4032.5	6.8880	.017444	4027.8	6.8677	.016792	4023.2	6.8480	.016185	4018.5	6.8288	.015619

TABLE 3 WATER AND STEAM

	p(MPa) = 31.000			= 32.000			= 33.000			= 34.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	31.0	.0008	.0009853	32.0	.0008	.0009848	32.9	.0007	.0009843	33.9	.0007	.0009839
10	71.8	.1474	.0009862	72.7	.1472	.0009857	73.6	.1470	.0009853	74.6	.1469	.0009849
20	112.6	.2893	.0009882	113.6	.2890	.0009878	114.5	.2888	.0009874	115.4	.2885	.0009869
30	153.6	.4267	.0009911	154.5	.4264	.0009907	155.4	.4261	.0009902	156.3	.4258	.0009898
40	194.7	.5600	.0009946	195.6	.5596	.0009942	196.4	.5592	.0009938	197.3	.5588	.0009934
50	235.8	.6893	.0009989	236.7	.6888	.0009985	237.5	.6883	.0009981	238.4	.6879	.0009977
60	277.0	.8148	.0010037	277.8	.8142	.0010033	278.6	.8137	.0010029	279.5	.8132	.0010025
70	318.2	.9367	.0010091	319.0	.9362	.0010087	319.9	.9356	.0010083	320.7	.9350	.0010078
80	359.5	1.0554	.0010150	360.3	1.0548	.0010146	361.1	1.0541	.0010142	361.9	1.0535	.0010137
90	400.9	1.1709	.0010215	401.7	1.1703	.0010211	402.5	1.1696	.0010206	403.2	1.1689	.0010202
100	442.4	1.2836	.0010285	443.1	1.2829	.0010280	443.9	1.2821	.0010276	444.7	1.2814	.0010271
110	483.9	1.3935	.0010360	484.7	1.3927	.0010355	485.4	1.3920	.0010350	486.2	1.3912	.0010345
120	525.6	1.5009	.0010440	526.3	1.5001	.0010435	527.1	1.4992	.0010430	527.8	1.4984	.0010425
130	567.4	1.6059	.0010525	568.1	1.6050	.0010520	568.8	1.6042	.0010514	569.5	1.6033	.0010509
140	609.4	1.7087	.0010616	610.1	1.7078	.0010610	610.8	1.7069	.0010605	611.4	1.7060	.0010599
150	651.6	1.8095	.0010712	652.2	1.8085	.0010706	652.9	1.8076	.0010701	653.5	1.8066	.0010695
160	693.9	1.9084	.0010815	694.5	1.9074	.0010808	695.1	1.9063	.0010802	695.8	1.9053	.0010796
170	736.4	2.0055	.0010923	737.0	2.0044	.0010917	737.6	2.0033	.0010910	738.2	2.0022	.0010904
180	779.2	2.1011	.0011039	779.8	2.0999	.0011032	780.4	2.0987	.0011025	780.9	2.0975	.0011018
190	822.3	2.1951	.0011162	822.8	2.1938	.0011154	823.4	2.1925	.0011146	823.9	2.1913	.0011139
200	865.7	2.2877	.0011292	866.2	2.2864	.0011284	866.7	2.2850	.0011276	867.2	2.2837	.0011268
210	909.4	2.3791	.0011431	909.9	2.3777	.0011423	910.3	2.3763	.0011414	910.8	2.3749	.0011405
220	953.5	2.4695	.0011580	953.9	2.4680	.0011570	954.3	2.4664	.0011561	954.7	2.4649	.0011551
230	998.0	2.5589	.0011739	998.4	2.5572	.0011728	998.7	2.5556	.0011718	999.1	2.5540	.0011707
240	1043.1	2.6475	.0011910	1043.3	2.6457	.0011898	1043.6	2.6440	.0011886	1043.9	2.6422	.0011875
250	1088.6	2.7354	.0012094	1088.8	2.7335	.0012081	1089.1	2.7316	.0012068	1089.3	2.7298	.0012055
260	1134.8	2.8229	.0012292	1135.0	2.8209	.0012278	1135.1	2.8188	.0012263	1135.3	2.8168	.0012249
270	1181.8	2.9102	.0012508	1181.8	2.9079	.0012492	1181.9	2.9057	.0012475	1181.9	2.9035	.0012459
280	1229.6	2.9973	.0012744	1229.5	2.9949	.0012725	1229.4	2.9924	.0012706	1229.3	2.9900	.0012688
290	1278.3	3.0847	.0013003	1278.1	3.0820	.0012981	1277.9	3.0793	.0012960	1277.7	3.0767	.0012939
300	1328.3	3.1726	.0013290	1327.9	3.1696	.0013264	1327.5	3.1666	.0013240	1327.1	3.1637	.0013215

TABLE 3 WATER AND STEAM

	p(MPa) = 31.000			= 32.000			= 33.000			= 34.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1379.6	3.2614	.0013611	1379.0	3.2580	.0013581	1378.4	3.2547	.0013552	1377.9	3.2514	.0013523
320	1432.7	3.3516	.0013975	1431.8	3.3478	.0013938	1431.0	3.3440	.0013903	1430.1	3.3403	.0013868
330	1487.9	3.4440	.0014392	1486.7	3.4395	.0014347	1485.5	3.4352	.0014304	1484.4	3.4309	.0014262
340	1545.9	3.5393	.0014880	1544.2	3.5341	.0014824	1542.6	3.5290	.0014769	1541.0	3.5240	.0014716
350	1607.5	3.6390	.0015463	1605.1	3.6327	.0015389	1602.9	3.6266	.0015318	1600.7	3.6207	.0015251
360	1674.5	3.7459	.0016175	1671.1	3.7381	.0016073	1668.0	3.7306	.0015976	1665.0	3.7234	.0015885
370	1743.5	3.8540	.0017106	1738.4	3.8435	.0016952	1733.8	3.8337	.0016811	1729.5	3.8244	.0016680
380	1828.2	3.9847	.0018431	1819.9	3.9692	.0018168	1812.5	3.9551	.0017936	1805.9	3.9423	.0017730
390	1937.9	4.1513	.0020671	1921.3	4.1232	.0020092	1907.7	4.0997	.0019631	1896.2	4.0795	.0019249
400	2106.1	4.4029	.0025657	2065.5	4.3389	.0023903	2035.2	4.2905	.0022686	2011.8	4.2525	.0021795
410	2324.8	4.7254	.0034952	2262.7	4.6297	.0031308	2210.5	4.5490	.0028552	2167.8	4.4824	.0026491
420	2503.7	4.9855	.0044573	2447.9	4.8989	.0040308	2393.1	4.8143	.0036555	2342.2	4.7359	.0033397
430	2629.2	5.1654	.0052208	2586.3	5.0972	.0048131	2541.1	5.0263	.0044287	2495.4	4.9553	.0040763
440	2721.0	5.2952	.0058186	2686.9	5.2394	.0054339	2651.7	5.1827	.0050718	2615.6	5.1252	.0047314
450	2797.3	5.4014	.0063349	2768.2	5.3526	.0059581	2738.3	5.3033	.0056035	2707.7	5.2535	.0052697
460	2863.0	5.4916	.0067932	2837.6	5.4479	.0064210	2811.6	5.4040	.0060707	2785.0	5.3597	.0057409
470	2921.2	5.5704	.0072087	2898.6	5.5306	.0068386	2875.6	5.4906	.0064905	2852.1	5.4506	.0061627
480	2973.9	5.6410	.0075914	2953.6	5.6041	.0072219	2932.8	5.5672	.0068744	2911.8	5.5303	.0065473
490	3022.6	5.7052	.0079484	3004.0	5.6706	.0075783	2985.1	5.6362	.0072304	2966.0	5.6018	.0069028
500	3068.1	5.7644	.0082847	3051.0	5.7318	.0079131	3033.6	5.6993	.0075638	3016.0	5.6670	.0072351
510	3111.0	5.8196	.0086037	3095.1	5.7885	.0082300	3079.1	5.7578	.0078788	3062.8	5.7272	.0075484
520	3151.9	5.8714	.0089083	3137.1	5.8418	.0085319	3122.1	5.8124	.0081784	3107.0	5.7832	.0078457
530	3191.1	5.9205	.0092005	3177.2	5.8920	.0088211	3163.2	5.8638	.0084648	3149.1	5.8359	.0081296
540	3228.7	5.9671	.0094818	3215.7	5.9397	.0090991	3202.5	5.9125	.0087397	3189.3	5.8857	.0084017
550	3265.2	6.0116	.0097536	3252.9	5.9851	.0093674	3240.5	5.9589	.0090047	3228.0	5.9330	.0086636
560	3300.5	6.0543	.010017	3288.9	6.0286	.0096271	3277.1	6.0032	.0092610	3265.4	5.9781	.0089166
570	3334.9	6.0954	.010273	3323.8	6.0703	.0098791	3312.7	6.0456	.0095094	3301.6	6.0213	.0091617
580	3368.4	6.1349	.010522	3357.9	6.1105	.010124	3347.4	6.0865	.0097509	3336.8	6.0629	.0093996
590	3401.3	6.1732	.010765	3391.3	6.1494	.010363	3381.2	6.1259	.0099861	3371.1	6.1029	.0096312
600	3433.5	6.2103	.011003	3423.9	6.1870	.010597	3414.3	6.1641	.010216	3404.7	6.1416	.0098572

TABLE 3 WATER AND STEAM

p(MPa)	= 31.000			= 32.000			= 33.000			= 34.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3465.1	6.2463	.011236	3456.0	6.2235	.010825	3446.8	6.2010	.010440	3437.6	6.1790	.010078
620	3496.2	6.2813	.011464	3487.5	6.2589	.011049	3478.7	6.2370	.010660	3469.9	6.2154	.010294
630	3526.9	6.3155	.011688	3518.6	6.2935	.011269	3510.1	6.2720	.010876	3501.7	6.2508	.010506
640	3557.3	6.3489	.011909	3549.2	6.3273	.011485	3541.1	6.3061	.011088	3533.0	6.2853	.010714
650	3587.2	6.3816	.012126	3579.5	6.3603	.011698	3571.7	6.3394	.011296	3563.9	6.3189	.010918
660	3616.9	6.4135	.012339	3609.4	6.3926	.011907	3602.0	6.3720	.011501	3594.5	6.3518	.011119
670	3646.3	6.4449	.012550	3639.1	6.4242	.012113	3631.9	6.4039	.011703	3624.7	6.3841	.011317
680	3675.5	6.4757	.012758	3668.6	6.4552	.012317	3661.6	6.4352	.011902	3654.6	6.4156	.011513
690	3704.5	6.5059	.012963	3697.8	6.4857	.012518	3691.1	6.4660	.012099	3684.3	6.4466	.011705
700	3733.2	6.5356	.013166	3726.8	6.5157	.012716	3720.3	6.4962	.012293	3713.8	6.4771	.011895
710	3761.8	6.5648	.013367	3755.6	6.5451	.012912	3749.3	6.5258	.012485	3743.0	6.5070	.012083
720	3790.3	6.5936	.013566	3784.2	6.5741	.013106	3778.2	6.5550	.012674	3772.1	6.5364	.012269
730	3818.6	6.6220	.013762	3812.7	6.6027	.013298	3806.9	6.5838	.012862	3801.0	6.5653	.012452
740	3846.8	6.6500	.013957	3841.1	6.6308	.013488	3835.4	6.6121	.013048	3829.8	6.5939	.012634
750	3874.9	6.6775	.014149	3869.4	6.6586	.013676	3863.9	6.6401	.013232	3858.4	6.6220	.012814
760	3902.8	6.7047	.014340	3897.5	6.6859	.013862	3892.2	6.6676	.013414	3886.9	6.6497	.012992
770	3930.7	6.7316	.014530	3925.5	6.7130	.014047	3920.4	6.6948	.013594	3915.3	6.6770	.013168
780	3958.5	6.7581	.014718	3953.5	6.7396	.014230	3948.5	6.7216	.013773	3943.5	6.7040	.013343
790	3986.2	6.7843	.014904	3981.3	6.7659	.014412	3976.5	6.7481	.013950	3971.7	6.7306	.013516
800	4013.8	6.8101	.015089	4009.1	6.7919	.014592	4004.4	6.7742	.014126	3999.8	6.7569	.013688

TABLE 3 WATER AND STEAM

	p(MPa) = 35.000			= 36.000			= 37.000			= 38.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	34.9	.0007	.0009834	35.9	.0006	.0009830	36.8	.0006	.0009825	37.8	.0005	.0009820
10	75.5	.1467	.0009844	76.5	.1466	.0009840	77.4	.1464	.0009836	78.3	.1462	.0009831
20	116.3	.2883	.0009865	117.2	.2880	.0009861	118.1	.2878	.0009857	119.0	.2875	.0009853
30	157.2	.4254	.0009894	158.1	.4251	.0009890	159.0	.4248	.0009886	159.9	.4245	.0009882
40	198.2	.5584	.0009930	199.0	.5580	.0009926	199.9	.5576	.0009922	200.8	.5573	.0009918
50	239.2	.6874	.0009973	240.1	.6870	.0009969	240.9	.6865	.0009965	241.8	.6861	.0009961
60	280.3	.8127	.0010021	281.1	.8122	.0010017	282.0	.8117	.0010013	282.8	.8112	.0010009
70	321.5	.9345	.0010074	322.3	.9339	.0010070	323.1	.9333	.0010066	323.9	.9328	.0010062
80	362.7	1.0529	.0010133	363.5	1.0523	.0010129	364.3	1.0517	.0010125	365.1	1.0511	.0010121
90	404.0	1.1683	.0010197	404.8	1.1676	.0010193	405.6	1.1669	.0010189	406.4	1.1663	.0010184
100	445.4	1.2807	.0010266	446.2	1.2800	.0010262	446.9	1.2793	.0010257	447.7	1.2786	.0010253
110	486.9	1.3904	.0010341	487.6	1.3897	.0010336	488.4	1.3889	.0010331	489.1	1.3881	.0010326
120	528.5	1.4976	.0010420	529.2	1.4968	.0010415	529.9	1.4960	.0010410	530.7	1.4952	.0010405
130	570.2	1.6024	.0010504	570.9	1.6016	.0010499	571.6	1.6007	.0010494	572.3	1.5998	.0010489
140	612.1	1.7050	.0010594	612.8	1.7041	.0010588	613.5	1.7032	.0010583	614.2	1.7023	.0010577
150	654.2	1.8056	.0010689	654.8	1.8046	.0010683	655.5	1.8036	.0010677	656.1	1.8027	.0010672
160	696.4	1.9042	.0010790	697.0	1.9032	.0010784	697.7	1.9022	.0010778	698.3	1.9011	.0010772
170	738.8	2.0011	.0010897	739.4	2.0000	.0010890	740.0	1.9989	.0010884	740.6	1.9978	.0010878
180	781.5	2.0963	.0011011	782.1	2.0952	.0011004	782.7	2.0940	.0010997	783.2	2.0928	.0010990
190	824.4	2.1900	.0011131	825.0	2.1888	.0011124	825.5	2.1876	.0011116	826.1	2.1863	.0011109
200	867.7	2.2824	.0011260	868.2	2.2811	.0011252	868.7	2.2797	.0011244	869.2	2.2784	.0011236
210	911.2	2.3735	.0011396	911.7	2.3721	.0011387	912.1	2.3707	.0011379	912.6	2.3693	.0011370
220	955.1	2.4634	.0011542	955.5	2.4619	.0011532	956.0	2.4604	.0011523	956.4	2.4589	.0011513
230	999.4	2.5524	.0011697	999.8	2.5508	.0011687	1000.2	2.5492	.0011676	1000.5	2.5476	.0011666
240	1044.2	2.6405	.0011863	1044.5	2.6388	.0011852	1044.8	2.6371	.0011841	1045.1	2.6354	.0011830
250	1089.5	2.7279	.0012042	1089.8	2.7261	.0012030	1090.0	2.7242	.0012017	1090.2	2.7224	.0012005
260	1135.4	2.8148	.0012235	1135.6	2.8128	.0012221	1135.7	2.8108	.0012207	1135.9	2.8089	.0012193
270	1182.0	2.9013	.0012443	1182.0	2.8991	.0012428	1182.1	2.8970	.0012412	1182.2	2.8949	.0012397
280	1229.3	2.9877	.0012670	1229.3	2.9853	.0012652	1229.2	2.9830	.0012635	1229.2	2.9807	.0012617
290	1277.5	3.0741	.0012918	1277.4	3.0715	.0012898	1277.2	3.0689	.0012878	1277.1	3.0664	.0012858
300	1326.8	3.1608	.0013191	1326.5	3.1580	.0013168	1326.2	3.1551	.0013144	1325.9	3.1523	.0013122

TABLE 3 WATER AND STEAM

p(MPa)	= 35.000			= 36.000			= 37.000			= 38.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1377.3	3.2482	.0013494	1376.8	3.2450	.0013467	1376.3	3.2419	.0013440	1375.9	3.2388	.0013413
320	1429.4	3.3367	.0013835	1428.6	3.3331	.0013802	1427.9	3.3296	.0013770	1427.2	3.3261	.0013738
330	1483.3	3.4268	.0014221	1482.2	3.4227	.0014181	1481.2	3.4187	.0014142	1480.2	3.4147	.0014104
340	1539.5	3.5192	.0014666	1538.0	3.5145	.0014616	1536.7	3.5098	.0014569	1535.3	3.5053	.0014522
350	1598.7	3.6149	.0015186	1596.7	3.6094	.0015123	1594.8	3.6039	.0015063	1593.0	3.5987	.0015006
360	1662.3	3.7166	.0015799	1659.6	3.7099	.0015717	1657.2	3.7035	.0015639	1654.8	3.6974	.0015564
370	1725.5	3.8156	.0016558	1721.8	3.8073	.0016444	1718.3	3.7993	.0016338	1715.0	3.7917	.0016237
380	1799.9	3.9304	.0017544	1794.5	3.9194	.0017375	1789.4	3.9091	.0017219	1784.8	3.8993	.0017076
390	1886.3	4.0617	.0018925	1877.6	4.0457	.0018643	1869.9	4.0312	.0018395	1862.9	4.0179	.0018173
400	1993.1	4.2214	.0021108	1977.5	4.1953	.0020558	1964.4	4.1727	.0020103	1953.0	4.1528	.0019717
410	2133.1	4.4278	.0024940	2104.8	4.3829	.0023753	2081.5	4.3453	.0022823	2062.0	4.3135	.0022078
420	2296.7	4.6656	.0030817	2257.0	4.6040	.0028739	2222.6	4.5504	.0027068	2193.1	4.5040	.0025717
430	2450.6	4.8861	.0037614	2408.1	4.8205	.0034872	2368.9	4.7599	.0032531	2333.3	4.7048	.0030554
440	2577.2	5.0649	.0044041	2538.8	5.0050	.0041052	2501.1	4.9467	.0038349	2465.0	4.8908	.0035946
450	2676.4	5.2031	.0049558	2644.5	5.1524	.0046609	2612.1	5.1013	.0043844	2579.1	5.0497	.0041238
460	2758.0	5.3151	.0054304	2730.4	5.2704	.0051381	2702.5	5.2255	.0048633	2674.3	5.1805	.0046052
470	2828.2	5.4103	.0058539	2804.0	5.3700	.0055629	2779.4	5.3297	.0052888	2754.6	5.2894	.0050307
480	2890.4	5.4934	.0062390	2868.7	5.4566	.0059482	2846.7	5.4197	.0056740	2824.6	5.3829	.0054153
490	2946.6	5.5676	.0065941	2926.9	5.5334	.0063028	2907.1	5.4993	.0060278	2887.0	5.4653	.0057682
500	2998.3	5.6349	.0069253	2980.3	5.6028	.0066329	2962.1	5.5710	.0063568	2943.8	5.5392	.0060958
510	3046.4	5.6968	.0072369	3029.9	5.6666	.0069431	3013.1	5.6365	.0066654	2996.3	5.6066	.0064029
520	3091.8	5.7543	.0075323	3076.4	5.7256	.0072365	3060.9	5.6971	.0069570	3045.3	5.6688	.0066927
530	3134.8	5.8083	.0078137	3120.5	5.7809	.0075157	3106.0	5.7537	.0072341	3091.5	5.7268	.0069678
540	3176.0	5.8592	.0080832	3162.5	5.8329	.0077827	3149.0	5.8069	.0074988	3135.4	5.7811	.0072302
550	3215.4	5.9074	.0083423	3202.8	5.8821	.0080391	3190.1	5.8571	.0077526	3177.3	5.8323	.0074816
560	3253.5	5.9534	.0085922	3241.6	5.9290	.0082862	3229.6	5.9048	.0079970	3217.6	5.8810	.0077234
570	3290.4	5.9974	.0088341	3279.1	5.9737	.0085250	3267.8	5.9503	.0082330	3256.4	5.9273	.0079567
580	3326.2	6.0396	.0090687	3315.5	6.0166	.0087565	3304.7	5.9939	.0084615	3294.0	5.9716	.0081824
590	3361.0	6.0802	.0092969	3350.9	6.0578	.0089815	3340.7	6.0358	.0086835	3330.4	6.0140	.0084015
600	3395.1	6.1194	.0095194	3385.4	6.0976	.0092007	3375.7	6.0761	.0088995	3365.9	6.0549	.0086145

TABLE 3 WATER AND STEAM

	p(MPa) = 35.000			= 36.000			= 37.000			= 38.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3428.4	6.1574	.0097366	3419.1	6.1361	.0094145	3409.9	6.1151	.0091102	3400.6	6.0944	.0088221
620	3461.1	6.1942	.0099491	3452.3	6.1733	.0096236	3443.4	6.1528	.0093160	3434.5	6.1326	.0090249
630	3493.2	6.2300	.010157	3484.8	6.2095	.0098283	3476.3	6.1894	.0095174	3467.8	6.1697	.0092232
640	3524.9	6.2648	.010362	3516.8	6.2448	.010029	3508.6	6.2251	.0097149	3500.5	6.2057	.0094175
650	3556.1	6.2988	.010562	3548.3	6.2791	.010226	3540.5	6.2598	.0099087	3532.7	6.2407	.0096082
660	3587.0	6.3321	.010760	3579.5	6.3127	.010420	3571.9	6.2936	.010099	3564.4	6.2749	.0097954
670	3617.5	6.3646	.010954	3610.2	6.3455	.010611	3603.0	6.3267	.010286	3595.8	6.3083	.0099795
680	3647.7	6.3965	.011145	3640.7	6.3776	.010799	3633.7	6.3591	.010471	3626.7	6.3410	.010161
690	3677.6	6.4277	.011334	3670.9	6.4091	.010984	3664.2	6.3909	.010653	3657.4	6.3730	.010339
700	3707.3	6.4584	.011520	3700.8	6.4400	.011166	3694.3	6.4221	.010832	3687.8	6.4044	.010515
710	3736.8	6.4885	.011704	3730.5	6.4704	.011347	3724.2	6.4526	.011009	3718.0	6.4352	.010689
720	3766.1	6.5181	.011886	3760.0	6.5002	.011525	3753.9	6.4827	.011184	3747.9	6.4655	.010861
730	3795.2	6.5473	.012066	3789.3	6.5296	.011701	3783.4	6.5123	.011356	3777.6	6.4953	.011030
740	3824.1	6.5760	.012244	3818.4	6.5585	.011875	3812.8	6.5413	.011527	3807.1	6.5245	.011197
750	3852.9	6.6043	.012419	3847.4	6.5870	.012048	3841.9	6.5700	.011696	3836.4	6.5534	.011363
760	3881.6	6.6322	.012594	3876.3	6.6150	.012218	3870.9	6.5982	.011863	3865.6	6.5818	.011527
770	3910.1	6.6597	.012766	3905.0	6.6427	.012387	3899.8	6.6260	.012028	3894.7	6.6097	.011689
780	3938.5	6.6868	.012937	3933.6	6.6699	.012554	3928.6	6.6535	.012192	3923.6	6.6373	.011850
790	3966.9	6.7135	.013107	3962.0	6.6969	.012720	3957.2	6.6805	.012355	3952.4	6.6645	.012009
800	3995.1	6.7400	.013275	3990.4	6.7234	.012884	3985.7	6.7072	.012516	3981.1	6.6914	.012166

TABLE 3 WATER AND STEAM

p (MPa)	= 39.000			= 40.000			= 41.000			= 42.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	38.8	.0005	.0009816	39.7	.0004	.0009811	40.7	.0004	.0009807	41.7	.0003	.0009802
10	79.3	.1461	.0009827	80.2	.1459	.0009823	81.1	.1457	.0009819	82.1	.1455	.0009814
20	119.9	.2872	.0009849	120.8	.2870	.0009845	121.8	.2867	.0009841	122.7	.2865	.0009837
30	160.7	.4241	.0009878	161.6	.4238	.0009874	162.5	.4235	.0009870	163.4	.4231	.0009866
40	201.6	.5569	.0009914	202.5	.5565	.0009910	203.4	.5561	.0009907	204.2	.5557	.0009903
50	242.6	.6856	.0009957	243.5	.6852	.0009953	244.3	.6847	.0009949	245.2	.6843	.0009945
60	283.6	.8107	.0010005	284.5	.8102	.0010001	285.3	.8097	.0009997	286.1	.8092	.0009993
70	324.7	.9322	.0010058	325.6	.9317	.0010054	326.4	.9311	.0010050	327.2	.9305	.0010046
80	365.9	1.0505	.0010116	366.7	1.0498	.0010112	367.5	1.0492	.0010108	368.3	1.0486	.0010104
90	407.1	1.1656	.0010180	407.9	1.1649	.0010175	408.7	1.1643	.0010171	409.5	1.1636	.0010167
100	448.5	1.2778	.0010248	449.2	1.2771	.0010244	450.0	1.2764	.0010239	450.7	1.2757	.0010235
110	489.9	1.3874	.0010322	490.6	1.3866	.0010317	491.4	1.3859	.0010312	492.1	1.3851	.0010308
120	531.4	1.4944	.0010400	532.1	1.4935	.0010395	532.8	1.4927	.0010390	533.6	1.4919	.0010385
130	573.0	1.5990	.0010483	573.7	1.5981	.0010478	574.4	1.5972	.0010473	575.1	1.5964	.0010468
140	614.8	1.7014	.0010572	615.5	1.7004	.0010567	616.2	1.6995	.0010561	616.9	1.6986	.0010556
150	656.8	1.8017	.0010666	657.4	1.8007	.0010660	658.1	1.7998	.0010655	658.8	1.7988	.0010649
160	698.9	1.9001	.0010766	699.6	1.8991	.0010760	700.2	1.8981	.0010754	700.8	1.8970	.0010748
170	741.3	1.9967	.0010871	741.9	1.9956	.0010865	742.5	1.9946	.0010858	743.1	1.9935	.0010852
180	783.8	2.0917	.0010983	784.4	2.0905	.0010976	785.0	2.0894	.0010969	785.5	2.0882	.0010963
190	826.6	2.1851	.0011102	827.2	2.1839	.0011094	827.7	2.1827	.0011087	828.3	2.1815	.0011080
200	869.7	2.2771	.0011228	870.2	2.2758	.0011220	870.7	2.2746	.0011212	871.2	2.2733	.0011204
210	913.1	2.3679	.0011362	913.5	2.3665	.0011353	914.0	2.3651	.0011345	914.5	2.3638	.0011337
220	956.8	2.4575	.0011504	957.2	2.4560	.0011495	957.7	2.4545	.0011486	958.1	2.4531	.0011477
230	1000.9	2.5460	.0011656	1001.3	2.5444	.0011646	1001.7	2.5429	.0011636	1002.1	2.5413	.0011627
240	1045.5	2.6337	.0011819	1045.8	2.6320	.0011808	1046.1	2.6303	.0011797	1046.4	2.6287	.0011786
250	1090.5	2.7206	.0011993	1090.8	2.7188	.0011981	1091.0	2.7170	.0011969	1091.3	2.7152	.0011957
260	1136.1	2.8069	.0012180	1136.3	2.8050	.0012166	1136.5	2.8030	.0012153	1136.7	2.8011	.0012140
270	1182.3	2.8928	.0012382	1182.4	2.8907	.0012367	1182.5	2.8886	.0012352	1182.6	2.8866	.0012337
280	1229.2	2.9784	.0012600	1229.2	2.9761	.0012583	1229.2	2.9739	.0012567	1229.3	2.9716	.0012550
290	1277.0	3.0639	.0012838	1276.8	3.0614	.0012819	1276.7	3.0590	.0012800	1276.7	3.0565	.0012782
300	1325.6	3.1496	.0013099	1325.4	3.1469	.0013077	1325.2	3.1442	.0013055	1324.9	3.1415	.0013034

TABLE 3 WATER AND STEAM

	p(MPa) = 39.000			= 40.000			= 41.000			= 42.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1375.4	3.2357	.0013387	1375.0	3.2327	.0013361	1374.6	3.2298	.0013336	1374.2	3.2268	.0013312
320	1426.6	3.3227	.0013707	1425.9	3.3193	.0013677	1425.4	3.3160	.0013648	1424.8	3.3127	.0013619
330	1479.3	3.4109	.0014068	1478.4	3.4071	.0014032	1477.6	3.4033	.0013997	1476.8	3.3997	.0013962
340	1534.1	3.5009	.0014477	1532.9	3.4965	.0014434	1531.7	3.4923	.0014391	1530.6	3.4881	.0014350
350	1591.3	3.5935	.0014950	1589.7	3.5885	.0014896	1588.1	3.5836	.0014844	1586.6	3.5788	.0014793
360	1652.6	3.6914	.0015493	1650.5	3.6856	.0015425	1648.5	3.6800	.0015359	1646.5	3.6745	.0015296
370	1711.9	3.7844	.0016142	1709.0	3.7774	.0016051	1706.3	3.7706	.0015966	1703.7	3.7641	.0015884
380	1780.5	3.8901	.0016942	1776.4	3.8814	.0016818	1772.7	3.8730	.0016701	1769.1	3.8651	.0016591
390	1856.5	4.0056	.0017972	1850.7	3.9942	.0017789	1845.3	3.9834	.0017621	1840.4	3.9733	.0017466
400	1943.0	4.1351	.0019384	1934.1	4.1190	.0019091	1926.1	4.1043	.0018831	1918.9	4.0908	.0018597
410	2045.5	4.2861	.0021467	2031.2	4.2621	.0020954	2018.7	4.2409	.0020517	2007.7	4.2218	.0020137
420	2167.7	4.4637	.0024616	2145.7	4.4285	.0023709	2126.7	4.3977	.0022953	2110.0	4.3704	.0022314
430	2301.3	4.6551	.0028892	2272.8	4.6105	.0027493	2247.3	4.5705	.0026312	2224.7	4.5347	.0025308
440	2431.0	4.8382	.0033835	2399.4	4.7893	.0031997	2370.3	4.7441	.0030403	2343.7	4.7026	.0029022
450	2546.8	4.9995	.0038878	2515.6	4.9511	.0036748	2485.8	4.9050	.0034842	2457.7	4.8615	.0033147
460	2645.8	5.1355	.0043632	2617.1	5.0906	.0041365	2588.9	5.0466	.0039269	2561.6	5.0141	.0037363
470	2729.6	5.2491	.0047879	2704.4	5.2089	.0045597	2679.2	5.1690	.0043455	2653.9	5.1293	.0041448
480	2802.2	5.3462	.0051713	2779.8	5.3097	.0049414	2757.2	5.2734	.0047249	2734.7	5.2373	.0045213
490	2866.8	5.4314	.0055229	2846.5	5.3977	.0052912	2826.1	5.3642	.0050724	2805.7	5.3309	.0048660
500	2925.3	5.5076	.0058490	2906.8	5.4762	.0056156	2888.1	5.4450	.0053947	2869.5	5.4140	.0051857
510	2979.3	5.5769	.0061544	2962.2	5.5474	.0059191	2945.0	5.5181	.0056962	2927.8	5.4889	.0054850
520	3029.5	5.6407	.0064424	3013.7	5.6128	.0062053	2997.8	5.5851	.0059804	2981.9	5.5575	.0057671
530	3076.9	5.7000	.0067155	3062.1	5.6735	.0064764	3047.4	5.6471	.0062496	3032.5	5.6210	.0060342
540	3121.7	5.7555	.0069758	3108.0	5.7302	.0067346	3094.2	5.7051	.0065057	3080.3	5.6801	.0062883
550	3164.5	5.8078	.0072249	3151.6	5.7835	.0069815	3138.7	5.7595	.0067505	3125.7	5.7356	.0065310
560	3205.5	5.8574	.0074643	3193.4	5.8340	.0072185	3181.2	5.8109	.0069852	3169.0	5.7883	.0067635
570	3245.0	5.9045	.0076950	3233.6	5.8819	.0074467	3222.1	5.8596	.0072111	3210.6	5.8376	.0069871
580	3283.2	5.9495	.0079180	3272.4	5.9276	.0076673	3261.5	5.9061	.0074291	3250.6	5.8848	.0072028
590	3320.2	5.9926	.0081343	3309.9	5.9714	.0078809	3299.6	5.9505	.0076402	3289.3	5.9298	.0074115
600	3356.2	6.0341	.0083445	3346.4	6.0135	.0080884	3336.6	5.9931	.0078451	3326.8	5.9731	.0076138

TABLE 3 WATER AND STEAM

	p(MPa) = 39.000			= 40.000			= 41.000			= 42.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3391.3	6.0741	.0085492	3382.0	6.0540	.0082903	3372.7	6.0342	.0080444	3363.3	6.0146	.0078106
620	3425.6	6.1127	.0087490	3416.7	6.0931	.0084873	3407.8	6.0738	.0082387	3398.9	6.0547	.0080024
630	3459.3	6.1502	.0089444	3450.8	6.1310	.0086798	3442.3	6.1121	.0084285	3433.7	6.0935	.0081895
640	3492.3	6.1866	.0091357	3484.2	6.1678	.0068683	3476.0	6.1493	.0086142	3467.8	6.1310	.0083726
650	3524.8	6.2220	.0093233	3517.0	6.2035	.0090530	3509.2	6.1854	.0087962	3501.3	6.1675	.0085519
660	3556.9	6.2565	.0095075	3549.4	6.2384	.0092343	3541.8	6.2206	.0089747	3534.3	6.2030	.0087277
670	3588.5	6.2902	.0096886	3581.3	6.2724	.0094124	3574.0	6.2549	.0091500	3566.8	6.2376	.0089004
680	3619.8	6.3232	.0098667	3612.8	6.3056	.0095876	3605.8	6.2884	.0093224	3598.8	6.2714	.0090701
690	3650.7	6.3554	.010042	3644.0	6.3382	.0097602	3637.2	6.3212	.0094922	3630.5	6.3045	.0092372
700	3681.3	6.3871	.010215	3674.8	6.3701	.0099302	3668.3	6.3533	.0096594	3661.8	6.3369	.0094017
710	3711.7	6.4181	.010386	3705.4	6.4013	.010098	3699.1	6.3848	.0098242	3692.9	6.3686	.0095639
720	3741.8	6.4486	.010554	3735.7	6.4320	.010263	3729.7	6.4157	.0099869	3723.6	6.3997	.0097238
730	3771.7	6.4786	.010720	3765.8	6.4622	.010427	3760.0	6.4461	.010147	3754.1	6.4303	.0098817
740	3801.4	6.5080	.010885	3795.7	6.4918	.010588	3790.1	6.4759	.010306	3784.4	6.4603	.010038
750	3830.9	6.5370	.011047	3825.5	6.5210	.010748	3820.0	6.5053	.010463	3814.5	6.4899	.010192
760	3860.3	6.5656	.011208	3855.0	6.5498	.010905	3849.7	6.5342	.010618	3844.4	6.5189	.010344
770	3889.5	6.5938	.011367	3884.4	6.5781	.011061	3879.3	6.5627	.010771	3874.1	6.5476	.010494
780	3918.6	6.6215	.011525	3913.6	6.6060	.011216	3908.7	6.5907	.010923	3903.7	6.5758	.010644
790	3947.6	6.6489	.011681	3942.7	6.6335	.011369	3937.9	6.6184	.011073	3933.1	6.6036	.010791
800	3976.4	6.6758	.011835	3971.7	6.6606	.011521	3967.1	6.6457	.011222	3962.4	6.6310	.010937

TABLE 3 WATER AND STEAM

	p(MPa) = 43.000			= 44.000			= 45.000			= 46.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	42.6	.0003	.0009798	43.6	.0002	.0009793	44.6	.0001	.0009789	45.5	.0001	.0009784
10	83.0	.1454	.0009810	83.9	.1452	.0009806	84.8	.1450	.0009802	85.8	.1448	.0009798
20	123.6	.2862	.0009832	124.5	.2859	.0009828	125.4	.2857	.0009824	126.3	.2854	.0009820
30	164.3	.4228	.0009862	165.2	.4225	.0009858	166.1	.4221	.0009854	166.9	.4218	.0009851
40	205.1	.5553	.0009899	206.0	.5549	.0009895	206.8	.5545	.0009891	207.7	.5541	.0009887
50	246.0	.6838	.0009941	246.9	.6834	.0009937	247.7	.6829	.0009933	248.6	.6825	.0009929
60	287.0	.8087	.0009989	287.8	.8082	.0009985	288.6	.8077	.0009981	289.5	.8072	.0009977
70	328.0	.9300	.0010042	328.8	.9294	.0010038	329.6	.9289	.0010033	330.4	.9283	.0010029
80	369.1	1.0480	.0010100	369.9	1.0474	.0010095	370.7	1.0468	.0010091	371.5	1.0462	.0010087
90	410.2	1.1630	.0010163	411.0	1.1623	.0010158	411.8	1.1617	.0010154	412.6	1.1610	.0010150
100	451.5	1.2750	.0010230	452.3	1.2743	.0010226	453.0	1.2736	.0010222	453.8	1.2729	.0010217
110	492.8	1.3843	.0010303	493.6	1.3836	.0010298	494.3	1.3829	.0010294	495.1	1.3821	.0010289
120	534.3	1.4911	.0010381	535.0	1.4903	.0010376	535.7	1.4895	.0010371	536.5	1.4887	.0010366
130	575.9	1.5955	.0010463	576.6	1.5947	.0010458	577.3	1.5938	.0010453	578.0	1.5930	.0010448
140	617.6	1.6977	.0010551	618.2	1.6968	.0010545	618.9	1.6959	.0010540	619.6	1.6950	.0010535
150	659.4	1.7978	.0010643	660.1	1.7969	.0010638	660.7	1.7959	.0010632	661.4	1.7950	.0010627
160	701.5	1.8960	.0010742	702.1	1.8950	.0010736	702.7	1.8940	.0010730	703.4	1.8930	.0010724
170	743.7	1.9924	.0010846	744.3	1.9913	.0010840	744.9	1.9903	.0010833	745.5	1.9892	.0010827
180	786.1	2.0871	.0010956	786.7	2.0860	.0010949	787.3	2.0849	.0010943	787.9	2.0837	.0010936
190	828.8	2.1803	.0011073	829.4	2.1791	.0011066	829.9	2.1779	.0011059	830.5	2.1767	.0011052
200	871.7	2.2720	.0011197	872.3	2.2707	.0011189	872.8	2.2694	.0011182	873.3	2.2682	.0011174
210	915.0	2.3624	.0011328	915.5	2.3611	.0011320	915.9	2.3597	.0011312	916.4	2.3584	.0011304
220	958.5	2.4516	.0011468	959.0	2.4502	.0011459	959.4	2.4488	.0011450	959.8	2.4473	.0011442
230	1002.4	2.5398	.0011617	1002.8	2.5383	.0011607	1003.2	2.5367	.0011598	1003.6	2.5352	.0011588
240	1046.8	2.6270	.0011776	1047.1	2.6254	.0011765	1047.5	2.6238	.0011754	1047.8	2.6222	.0011744
250	1091.6	2.7135	.0011945	1091.8	2.7117	.0011934	1092.1	2.7100	.0011922	1092.4	2.7083	.0011911
260	1136.9	2.7993	.0012127	1137.1	2.7974	.0012114	1137.3	2.7955	.0012102	1137.5	2.7937	.0012089
270	1182.7	2.8845	.0012323	1182.9	2.8825	.0012308	1183.0	2.8805	.0012294	1183.2	2.8785	.0012280
280	1229.3	2.9694	.0012534	1229.3	2.9672	.0012518	1229.4	2.9651	.0012502	1229.4	2.9629	.0012487
290	1276.6	3.0541	.0012763	1276.5	3.0518	.0012745	1276.5	3.0494	.0012727	1276.4	3.0471	.0012709
300	1324.7	3.1389	.0013013	1324.5	3.1363	.0012992	1324.4	3.1337	.0012972	1324.2	3.1312	.0012952

TABLE 3 WATER AND STEAM

	p(MPa) = 43.000			= 44.000			= 45.000			= 46.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1373.9	3.2239	.0013287	1373.5	3.2211	.0013263	1373.2	3.2182	.0013240	1372.9	3.2154	.0013217
320	1424.2	3.3095	.0013590	1423.7	3.3063	.0013563	1423.2	3.3032	.0013535	1422.7	3.3001	.0013509
330	1476.0	3.3960	.0013929	1475.2	3.3925	.0013896	1474.5	3.3890	.0013864	1473.8	3.3855	.0013833
340	1529.5	3.4840	.0014310	1528.5	3.4800	.0014271	1527.5	3.4760	.0014233	1526.5	3.4722	.0014195
350	1585.1	3.5741	.0014744	1583.8	3.5694	.0014697	1582.4	3.5649	.0014651	1581.1	3.5605	.0014606
360	1644.7	3.6692	.0015235	1642.9	3.6640	.0015176	1641.3	3.6590	.0015120	1639.7	3.6541	.0015065
370	1701.2	3.7578	.0015806	1698.8	3.7516	.0015731	1696.6	3.7457	.0015659	1694.4	3.7399	.0015590
380	1765.8	3.8574	.0016488	1762.6	3.8501	.0016389	1759.7	3.8430	.0016296	1756.8	3.8362	.0016207
390	1835.8	3.9637	.0017322	1831.5	3.9546	.0017188	1827.4	3.9459	.0017062	1823.6	3.9377	.0016943
400	1912.3	4.0782	.0018385	1906.2	4.0664	.0018192	1900.6	4.0554	.0018013	1895.3	4.0450	.0017848
410	1997.9	4.2044	.0019804	1989.0	4.1886	.0019507	1981.0	4.1739	.0019241	1973.6	4.1604	.0019000
420	2095.3	4.3460	.0021767	2082.3	4.3241	.0021294	2070.6	4.3042	.0020879	2060.1	4.2861	.0020512
430	2204.5	4.5024	.0024451	2186.5	4.4734	.0023713	2170.4	4.4471	.0023074	2155.8	4.4232	.0022515
440	2319.3	4.6645	.0027823	2297.2	4.6296	.0026780	2277.0	4.5977	.0025869	2258.6	4.5683	.0025069
450	2431.4	4.8206	.0031644	2406.9	4.7825	.0030313	2384.2	4.7469	.0029134	2363.1	4.7138	.0028088
460	2535.3	4.9633	.0035633	2510.2	4.9243	.0034071	2486.4	4.8874	.0032664	2464.0	4.8524	.0031398
470	2628.7	5.0900	.0039569	2604.2	5.0517	.0037840	2580.8	5.0152	.0036264	2558.3	4.9802	.0034823
480	2712.2	5.2015	.0043298	2689.8	5.1661	.0041501	2667.5	5.1312	.0039816	2645.4	5.0966	.0038238
490	2785.3	5.2979	.0046713	2764.9	5.2653	.0044878	2744.7	5.2330	.0043151	2724.6	5.2012	.0041527
500	2850.8	5.3832	.0049881	2832.1	5.3527	.0048013	2813.5	5.3226	.0046249	2795.0	5.2928	.0044583
510	2910.5	5.4600	.0052848	2893.3	5.4314	.0050952	2876.1	5.4030	.0049155	2858.9	5.3750	.0047453
520	2965.9	5.5302	.0055646	2949.8	5.5031	.0053724	2933.8	5.4763	.0051899	2917.9	5.4497	.0050167
530	3017.6	5.5951	.0058296	3002.7	5.5693	.0056351	2987.7	5.5439	.0054503	2972.8	5.5186	.0052744
540	3066.4	5.6554	.0060816	3052.4	5.6309	.0058851	3038.5	5.6066	.0056980	3024.5	5.5826	.0055199
550	3112.7	5.7120	.0063222	3099.6	5.6886	.0061236	3086.5	5.6654	.0059344	3073.4	5.6423	.0057541
560	3156.8	5.7653	.0065526	3144.5	5.7428	.0063519	3132.2	5.7206	.0061606	3119.9	5.6985	.0059783
570	3199.1	5.8157	.0067740	3187.5	5.7941	.0065711	3175.9	5.7727	.0063778	3164.4	5.7515	.0061934
580	3239.7	5.8637	.0069874	3228.8	5.8428	.0067824	3217.9	5.8222	.0065869	3207.0	5.8017	.0064004
590	3279.0	5.9094	.0071938	3268.7	5.8892	.0069864	3258.3	5.8693	.0067888	3248.0	5.8495	.0066002
600	3317.0	5.9532	.0073938	3307.2	5.9336	.0071841	3297.4	5.9143	.0069842	3287.6	5.8951	.0067935

TABLE 3 WATER AND STEAM

p(MPa)	= 43.000			= 44.000			= 45.000			= 46.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3354.0	5.9953	.0075881	3344.6	5.9763	.0073761	3335.3	5.9575	.0071739	3326.0	5.9389	.0069810
620	3390.0	6.0359	.0077774	3381.1	6.0173	.0075630	3372.2	5.9990	.0073585	3363.3	5.9809	.0071633
630	3425.2	6.0751	.0079620	3416.7	6.0569	.0077452	3408.2	6.0391	.0075384	3399.7	6.0214	.0073410
640	3459.7	6.1130	.0081425	3451.5	6.0953	.0079233	3443.4	6.0778	.0077142	3435.2	6.0605	.0075145
650	3493.5	6.1499	.0083193	3485.7	6.1325	.0080976	3477.8	6.1154	.0078861	3470.0	6.0985	.0076841
660	3526.8	6.1857	.0084926	3519.2	6.1687	.0082684	3511.7	6.1519	.0080545	3504.2	6.1353	.0078503
670	3559.5	6.2206	.0086627	3552.3	6.2039	.0084361	3545.1	6.1874	.0082198	3537.8	6.1711	.0080133
680	3591.8	6.2547	.0088299	3584.9	6.2383	.0086008	3577.9	6.2221	.0083821	3571.0	6.2061	.0081733
690	3623.8	6.2880	.0089943	3617.0	6.2718	.0087628	3610.3	6.2559	.0085418	3603.6	6.2402	.0083306
700	3655.3	6.3207	.0091563	3648.9	6.3047	.0089222	3642.4	6.2890	.0086988	3635.9	6.2735	.0084854
710	3686.6	6.3526	.0093158	3680.3	6.3369	.0090793	3674.1	6.3214	.0088536	3667.8	6.3062	.0086379
720	3717.6	6.3839	.0094732	3711.5	6.3684	.0092342	3705.5	6.3532	.0090061	3699.4	6.3381	.0087881
730	3748.3	6.4147	.0096285	3742.4	6.3994	.0093871	3736.6	6.3843	.0091566	3730.8	6.3695	.0089363
740	3778.8	6.4450	.0097818	3773.1	6.4298	.0095379	3767.5	6.4150	.0093051	3761.8	6.4003	.0090825
750	3809.0	6.4747	.0099333	3803.6	6.4597	.0096869	3798.1	6.4451	.0094517	3792.6	6.4306	.0092269
760	3839.1	6.5039	.010083	3833.8	6.4892	.0098342	3828.5	6.4746	.0095966	3823.2	6.4604	.0093695
770	3869.0	6.5327	.010231	3863.9	6.5181	.0099798	3858.7	6.5038	.0097398	3853.6	6.4896	.0095105
780	3898.7	6.5611	.010377	3893.8	6.5466	.010124	3888.8	6.5324	.0098815	3883.9	6.5185	.0096499
790	3928.3	6.5890	.010522	3923.5	6.5747	.010266	3918.7	6.5607	.010022	3913.9	6.5469	.0097878
800	3957.7	6.6166	.010666	3953.1	6.6024	.010407	3948.4	6.5885	.010160	3943.8	6.5749	.0099242

TABLE 3 WATER AND STEAM

	p(MPa) = 47.000			= 48.000			= 49.000			= 50.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	46.5	.0000	.0009780	47.4	-.0001	.0009776	48.4	-.0002	.0009771	49.3	-.0002	.0009767
10	86.7	.1446	.0009793	87.6	.1444	.0009789	88.6	.1443	.0009785	89.5	.1441	.0009781
20	127.2	.2851	.0009816	128.1	.2849	.0009812	129.0	.2846	.0009808	129.9	.2843	.0009804
30	167.8	.4215	.0009847	168.7	.4211	.0009843	169.6	.4208	.0009839	170.5	.4205	.0009835
40	208.6	.5537	.0009883	209.4	.5533	.0009879	210.3	.5529	.0009875	211.2	.5525	.0009872
50	249.4	.6820	.0009925	250.2	.6816	.0009921	251.1	.6811	.0009918	251.9	.6807	.0009914
60	290.3	.8067	.0009973	291.1	.8062	.0009969	292.0	.8057	.0009965	292.8	.8052	.0009961
70	331.2	.9278	.0010025	332.1	.9272	.0010021	332.9	.9267	.0010017	333.7	.9261	.0010014
80	372.3	1.0456	.0010083	373.1	1.0450	.0010079	373.9	1.0444	.0010075	374.7	1.0438	.0010071
90	413.4	1.1604	.0010146	414.1	1.1597	.0010141	414.9	1.1591	.0010137	415.7	1.1584	.0010133
100	454.5	1.2722	.0010213	455.3	1.2715	.0010208	456.1	1.2708	.0010204	456.8	1.2701	.0010200
110	495.8	1.3814	.0010285	496.6	1.3806	.0010280	497.3	1.3799	.0010276	498.0	1.3791	.0010271
120	537.2	1.4880	.0010362	537.9	1.4872	.0010357	538.6	1.4864	.0010352	539.4	1.4856	.0010347
130	578.7	1.5922	.0010443	579.4	1.5913	.0010438	580.1	1.5905	.0010433	580.8	1.5897	.0010428
140	620.3	1.6941	.0010530	621.0	1.6933	.0010524	621.7	1.6924	.0010519	622.4	1.6915	.0010514
150	662.1	1.7940	.0010621	662.7	1.7931	.0010616	663.4	1.7922	.0010610	664.1	1.7912	.0010605
160	704.0	1.8920	.0010718	704.6	1.8910	.0010713	705.3	1.8900	.0010707	705.9	1.8890	.0010701
170	746.1	1.9882	.0010821	746.7	1.9871	.0010815	747.4	1.9860	.0010809	748.0	1.9850	.0010803
180	788.5	2.0826	.0010930	789.0	2.0815	.0010923	789.6	2.0804	.0010917	790.2	2.0793	.0010910
190	831.0	2.1755	.0011045	831.6	2.1743	.0011038	832.1	2.1731	.0011031	832.7	2.1720	.0011024
200	873.8	2.2669	.0011167	874.3	2.2657	.0011159	874.9	2.2644	.0011152	875.4	2.2632	.0011144
210	916.9	2.3570	.0011296	917.4	2.3557	.0011288	917.9	2.3544	.0011280	918.4	2.3531	.0011272
220	960.3	2.4459	.0011433	960.7	2.4445	.0011424	961.2	2.4431	.0011416	961.6	2.4417	.0011407
230	1004.0	2.5337	.0011579	1004.4	2.5322	.0011569	1004.8	2.5307	.0011560	1005.2	2.5293	.0011551
240	1048.2	2.6206	.0011734	1048.5	2.6190	.0011724	1048.9	2.6174	.0011713	1049.2	2.6158	.0011703
250	1092.7	2.7065	.0011899	1093.0	2.7048	.0011888	1093.3	2.7031	.0011877	1093.6	2.7015	.0011866
260	1137.7	2.7918	.0012076	1138.0	2.7900	.0012064	1138.2	2.7882	.0012052	1138.5	2.7864	.0012040
270	1183.3	2.8765	.0012267	1183.5	2.8745	.0012253	1183.6	2.8726	.0012239	1183.8	2.8707	.0012226
280	1229.5	2.9608	.0012471	1229.6	2.9587	.0012456	1229.7	2.9566	.0012441	1229.8	2.9545	.0012426
290	1276.4	3.0448	.0012692	1276.4	3.0425	.0012675	1276.4	3.0402	.0012658	1276.4	3.0380	.0012641
300	1324.1	3.1287	.0012932	1323.9	3.1262	.0012913	1323.8	3.1237	.0012893	1323.7	3.1213	.0012874

TABLE 3 WATER AND STEAM

	p(MPa) = 47.000			= 48.000			= 49.000			= 50.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1372.6	3.2127	.0013194	1372.4	3.2100	.0013172	1372.1	3.2073	.0013150	1371.9	3.2046	.0013128
320	1422.3	3.2971	.0013482	1421.8	3.2941	.0013457	1421.4	3.2911	.0013431	1421.0	3.2882	.0013406
330	1473.2	3.3822	.0013802	1472.5	3.3788	.0013772	1471.9	3.3755	.0013742	1471.3	3.3723	.0013713
340	1525.6	3.4683	.0014159	1524.7	3.4646	.0014123	1523.8	3.4609	.0014089	1523.0	3.4572	.0014055
350	1579.9	3.5562	.0014562	1578.7	3.5519	.0014520	1577.5	3.5477	.0014479	1576.4	3.5436	.0014438
360	1638.1	3.6493	.0015012	1636.6	3.6446	.0014961	1635.2	3.6400	.0014911	1633.9	3.6355	.0014862
370	1692.4	3.7343	.0015524	1690.4	3.7289	.0015460	1688.6	3.7236	.0015399	1686.8	3.7184	.0015339
380	1754.1	3.8296	.0016122	1751.6	3.8232	.0016041	1749.2	3.8170	.0015964	1746.8	3.8110	.0015889
390	1820.1	3.9297	.0016831	1816.7	3.9221	.0016726	1813.5	3.9148	.0016625	1810.5	3.9077	.0016529
400	1890.5	4.0351	.0017695	1885.9	4.0258	.0017552	1881.7	4.0168	.0017417	1877.7	4.0083	.0017291
410	1966.8	4.1477	.0018780	1960.6	4.1358	.0018578	1954.8	4.1246	.0018392	1949.4	4.1140	.0018219
420	2050.6	4.2694	.0020184	2041.9	4.2540	.0019889	2033.9	4.2396	.0019622	2026.6	4.2262	.0019378
430	2142.7	4.4014	.0022023	2130.8	4.3814	.0021586	2120.0	4.3629	.0021196	2110.1	4.3458	.0020845
440	2241.8	4.5413	.0024365	2226.5	4.5165	.0023741	2212.5	4.4935	.0023186	2199.7	4.4723	.0022689
450	2343.5	4.6829	.0027158	2325.5	4.6542	.0026329	2308.7	4.6275	.0025587	2293.2	4.6026	.0024921
460	2442.9	4.8195	.0030258	2423.1	4.7884	.0029232	2404.6	4.7592	.0028306	2387.2	4.7316	.0027470
470	2536.8	4.9466	.0033508	2516.3	4.9146	.0032311	2496.9	4.8842	.0031220	2478.4	4.8552	.0030225
480	2623.5	5.0626	.0036761	2603.2	5.0308	.0035440	2583.7	5.0003	.0034212	2564.9	4.9709	.0033082
490	2704.8	5.1698	.0040001	2685.1	5.1389	.0038568	2665.7	5.1085	.0037224	2646.6	5.0786	.0035963
500	2776.7	5.2635	.0043011	2758.6	5.2346	.0041530	2740.7	5.2061	.0040135	2723.0	5.1782	.0038822
510	2841.9	5.3473	.0045842	2825.0	5.3199	.0044318	2808.3	5.2930	.0042877	2791.8	5.2665	.0041516
520	2901.9	5.4234	.0048523	2886.1	5.3975	.0046963	2870.4	5.3719	.0045483	2854.9	5.3466	.0044080
530	2957.9	5.4936	.0051072	2943.1	5.4688	.0049482	2928.3	5.4444	.0047969	2913.7	5.4202	.0046531
540	3010.6	5.5587	.0053502	2996.6	5.5351	.0051886	2982.7	5.5117	.0050346	2968.9	5.4886	.0048878
550	3060.3	5.6195	.0055823	3047.2	5.5970	.0054184	3034.2	5.5746	.0052620	3021.1	5.5525	.0051127
560	3107.6	5.6767	.0058044	3095.3	5.6550	.0056384	3083.0	5.6336	.0054798	3070.7	5.6124	.0053284
570	3152.8	5.7305	.0060175	3141.2	5.7097	.0058494	3129.6	5.6891	.0056889	3118.0	5.6688	.0055354
580	3196.0	5.7815	.0062224	3185.1	5.7615	.0060524	3174.1	5.7417	.0058898	3163.2	5.7221	.0057344
590	3237.6	5.8300	.0064201	3227.3	5.8107	.0062481	3216.9	5.7915	.0060835	3206.6	5.7726	.0059261
600	3277.7	5.8762	.0066113	3267.9	5.8575	.0064372	3258.1	5.8390	.0062707	3248.3	5.8207	.0061113

TABLE 3 WATER AND STEAM

p(MPa)	= 47.000			= 48.000			= 49.000			= 50.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3316.6	5.9205	.0067967	3307.3	5.9023	.0066205	3298.0	5.8844	.0064520	3288.6	5.8666	.0062907
620	3354.4	5.9630	.0069769	3345.5	5.9453	.0067986	3336.6	5.9279	.0066281	3327.7	5.9106	.0064647
630	3391.1	6.0040	.0071524	3392.7	5.9867	.0069720	3374.2	5.9697	.0067994	3365.7	5.9529	.0066341
640	3427.1	6.0435	.0073237	3418.9	6.0267	.0071412	3410.8	6.0101	.0069665	3402.7	5.9937	.0067992
650	3462.2	6.0818	.0074911	3454.4	6.0653	.0073065	3446.7	6.0491	.0071297	3438.9	6.0331	.0069604
660	3496.7	6.1190	.0076551	3489.2	6.1028	.0074683	3481.8	6.0869	.0072895	3474.3	6.0712	.0071182
670	3530.6	6.1551	.0078158	3523.4	6.1393	.0076269	3516.2	6.1237	.0074460	3509.1	6.1083	.0072727
680	3564.0	6.1903	.0079737	3557.1	6.1748	.0077826	3550.2	6.1595	.0075997	3543.3	6.1443	.0074244
690	3596.9	6.2247	.0081288	3590.3	6.2094	.0079356	3583.6	6.1943	.0077506	3576.9	6.1795	.0075733
700	3629.5	6.2583	.0082814	3623.0	6.2432	.0080861	3616.6	6.2284	.0078990	3610.2	6.2138	.0077197
710	3661.6	6.2911	.0084316	3655.4	6.2763	.0082342	3649.2	6.2617	.0080451	3643.0	6.2473	.0078638
720	3693.4	6.3233	.0085797	3687.4	6.3087	.0083801	3681.4	6.2944	.0081890	3675.4	6.2802	.0080057
730	3724.9	6.3549	.0087257	3719.1	6.3405	.0085240	3713.3	6.3263	.0083308	3707.5	6.3123	.0081456
740	3756.2	6.3859	.0088697	3750.6	6.3717	.0086659	3744.9	6.3577	.0084707	3739.3	6.3439	.0082835
750	3787.2	6.4164	.0090119	3781.7	6.4023	.0088060	3776.3	6.3885	.0086088	3770.9	6.3749	.0084196
760	3818.0	6.4463	.0091523	3812.7	6.4324	.0089444	3807.4	6.4188	.0087451	3802.2	6.4053	.0085540
770	3848.5	6.4757	.0092911	3843.4	6.4620	.0090811	3838.3	6.4486	.0088798	3833.3	6.4353	.0086868
780	3878.9	6.5047	.0094283	3874.0	6.4912	.0092162	3869.0	6.4778	.0090129	3864.1	6.4647	.0088179
790	3909.1	6.5333	.0095641	3904.3	6.5199	.0093498	3899.6	6.5067	.0091445	3894.8	6.4937	.0089476
800	3939.2	6.5614	.0096983	3934.5	6.5481	.0094820	3929.9	6.5351	.0092747	3925.3	6.5222	.0090759

TABLE 3 WATER AND STEAM

	p(MPa) = 52.000			= 54.000			= 56.000			= 58.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	51.3	-.0004	.0009758	53.2	-.0006	.0009749	55.1	-.0008	.0009741	56.9	-.0010	.0009732
10	91.3	.1437	.0009773	93.2	.1433	.0009764	95.0	.1429	.0009756	96.8	.1425	.0009748
20	131.7	.2838	.0009796	133.5	.2832	.0009788	135.3	.2827	.0009781	137.1	.2821	.0009773
30	172.2	.4198	.0009827	174.0	.4191	.0009819	175.8	.4184	.0009812	177.5	.4177	.0009804
40	212.9	.5517	.0009864	214.6	.5510	.0009856	216.3	.5502	.0009849	218.1	.5494	.0009841
50	253.6	.6798	.0009906	255.3	.6789	.0009898	257.0	.6780	.0009891	258.7	.6771	.0009883
60	294.4	.8042	.0009953	296.1	.8032	.0009946	297.8	.8022	.0009938	299.4	.8012	.0009930
70	335.3	.9250	.0010006	336.9	.9239	.0009998	338.6	.9228	.0009990	340.2	.9218	.0009982
80	376.2	1.0426	.0010063	377.8	1.0414	.0010055	379.4	1.0402	.0010047	381.0	1.0391	.0010039
90	417.3	1.1571	.0010125	418.8	1.1559	.0010116	420.4	1.1546	.0010108	421.9	1.1533	.0010100
100	458.4	1.2688	.0010191	459.9	1.2674	.0010183	461.4	1.2660	.0010174	462.9	1.2647	.0010166
110	499.5	1.3777	.0010262	501.0	1.3762	.0010253	502.5	1.3747	.0010245	504.0	1.3733	.0010236
120	540.8	1.4840	.0010338	542.3	1.4825	.0010329	543.7	1.4809	.0010320	545.2	1.4794	.0010310
130	582.2	1.5880	.0010419	583.6	1.5863	.0010409	585.0	1.5847	.0010399	586.5	1.5831	.0010390
140	623.7	1.6897	.0010504	625.1	1.6880	.0010494	626.5	1.6862	.0010484	627.9	1.6845	.0010474
150	665.4	1.7894	.0010594	666.7	1.7875	.0010583	668.1	1.7857	.0010573	669.4	1.7838	.0010562
160	707.2	1.8871	.0010690	708.5	1.8851	.0010678	709.8	1.8832	.0010667	711.1	1.8812	.0010656
170	749.2	1.9829	.0010791	750.5	1.9808	.0010779	751.7	1.9788	.0010767	752.9	1.9767	.0010755
180	791.4	2.0771	.0010897	792.6	2.0749	.0010885	793.8	2.0727	.0010872	795.0	2.0706	.0010860
190	833.8	2.1696	.0011010	834.9	2.1673	.0010997	836.1	2.1650	.0010983	837.2	2.1627	.0010970
200	876.5	2.2607	.0011130	877.5	2.2583	.0011115	878.6	2.2559	.0011101	879.7	2.2534	.0011087
210	919.4	2.3505	.0011256	920.4	2.3479	.0011241	921.4	2.3453	.0011225	922.4	2.3428	.0011210
220	962.6	2.4389	.0011390	963.5	2.4362	.0011373	964.4	2.4335	.0011357	965.3	2.4308	.0011341
230	1006.1	2.5263	.0011532	1006.9	2.5234	.0011514	1007.8	2.5205	.0011496	1008.6	2.5176	.0011479
240	1050.0	2.6127	.0011683	1050.7	2.6096	.0011664	1051.5	2.6065	.0011645	1052.2	2.6035	.0011626
250	1094.2	2.6981	.0011844	1094.9	2.6948	.0011823	1095.5	2.6915	.0011802	1096.2	2.6883	.0011781
260	1139.0	2.7828	.0012016	1139.5	2.7793	.0011992	1140.0	2.7758	.0011969	1140.6	2.7724	.0011947
270	1184.2	2.8668	.0012199	1184.6	2.8631	.0012173	1185.0	2.8593	.0012148	1185.4	2.8557	.0012123
280	1230.0	2.9504	.0012396	1230.2	2.9463	.0012367	1230.5	2.9423	.0012339	1230.8	2.9384	.0012312
290	1276.4	3.0335	.0012608	1276.4	3.0292	.0012576	1276.5	3.0249	.0012545	1276.7	3.0206	.0012514
300	1323.5	3.1165	.0012837	1323.4	3.1117	.0012801	1323.3	3.1071	.0012766	1323.2	3.1025	.0012731

TABLE 3 WATER AND STEAM

p(MPa)	= 52.000			= 54.000			= 56.000			= 58.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1371.4	3.1993	.0013086	1371.0	3.1942	.0013045	1370.7	3.1892	.0013005	1370.4	3.1842	.0012966
320	1420.3	3.2824	.0013358	1419.6	3.2768	.0013311	1419.0	3.2713	.0013265	1418.4	3.2659	.0013221
330	1470.2	3.3659	.0013657	1469.2	3.3597	.0013603	1468.2	3.3536	.0013551	1467.4	3.3477	.0013500
340	1521.4	3.4501	.0013989	1520.0	3.4432	.0013926	1518.7	3.4365	.0013865	1517.4	3.4300	.0013807
350	1574.3	3.5356	.0014361	1572.3	3.5278	.0014287	1570.5	3.5203	.0014216	1568.7	3.5130	.0014148
360	1631.3	3.6267	.0014770	1628.9	3.6183	.0014682	1626.7	3.6102	.0014599	1624.7	3.6024	.0014519
370	1683.4	3.7084	.0015226	1680.3	3.6988	.0015120	1677.4	3.6897	.0015020	1674.8	3.6809	.0014926
380	1742.5	3.7996	.0015749	1738.5	3.7887	.0015618	1734.9	3.7783	.0015497	1731.5	3.7684	.0015383
390	1804.8	3.8943	.0016351	1799.7	3.8817	.0016188	1795.1	3.8698	.0016037	1790.8	3.8585	.0015897
400	1870.3	3.9922	.0017059	1863.7	3.9774	.0016849	1857.7	3.9635	.0016659	1852.3	3.9505	.0016485
410	1939.6	4.0944	.0017907	1930.9	4.0765	.0017632	1923.2	4.0601	.0017387	1916.2	4.0448	.0017166
420	2013.4	4.2017	.0018946	2002.0	4.1798	.0018576	1992.0	4.1600	.0018252	1983.0	4.1419	.0017966
430	2092.6	4.3150	.0020237	2077.5	4.2880	.0019728	2064.5	4.2639	.0019293	2053.0	4.2421	.0018916
440	2177.0	4.4343	.0021840	2157.6	4.4011	.0021140	2140.9	4.3718	.0020552	2126.3	4.3456	.0020051
450	2265.5	4.5576	.0023780	2241.7	4.5181	.0022843	2221.0	4.4833	.0022062	2202.9	4.4523	.0021402
460	2355.6	4.6813	.0026024	2327.9	4.6366	.0024826	2303.6	4.5968	.0023824	2282.2	4.5611	.0022978
470	2444.4	4.8016	.0028489	2414.0	4.7532	.0027034	2386.9	4.7096	.0025806	2362.6	4.6701	.0024763
480	2529.9	4.9158	.0031086	2497.9	4.8653	.0029393	2468.9	4.8192	.0027950	2442.6	4.7771	.0026713
490	2610.8	5.0226	.0033737	2578.3	4.9714	.0031833	2548.4	4.9241	.0030193	2520.9	4.8804	.0028775
500	2688.6	5.1239	.0036426	2655.3	5.0717	.0034311	2624.5	5.0232	.0032483	2596.5	4.9788	.0030901
510	2759.5	5.2150	.0039018	2728.3	5.1655	.0036796	2698.3	5.1180	.0034822	2669.5	5.0727	.0033069
520	2824.3	5.2973	.0041491	2794.7	5.2498	.0039171	2766.2	5.2042	.0037096	2738.8	5.1605	.0035241
530	2884.7	5.3730	.0043865	2856.5	5.3272	.0041460	2829.1	5.2831	.0039293	2802.7	5.2407	.0037343
540	2941.5	5.4432	.0046148	2914.6	5.3991	.0043670	2888.3	5.3564	.0041425	2862.9	5.3151	.0039392
550	2995.2	5.5089	.0048343	2969.7	5.4664	.0045806	2944.5	5.4251	.0043494	2920.0	5.3850	.0041389
560	3046.3	5.5706	.0050453	3022.0	5.5297	.0047864	2998.1	5.4897	.0045497	2974.6	5.4509	.0043332
570	3094.9	5.6286	.0052480	3072.0	5.5892	.0049848	3049.2	5.5508	.0047433	3026.8	5.5132	.0045217
580	3141.4	5.6834	.0054431	3119.7	5.6455	.0051758	3098.1	5.6084	.0049302	3076.8	5.5721	.0047041
590	3185.9	5.7353	.0056310	3165.4	5.6988	.0053599	3145.0	5.6630	.0051104	3124.7	5.6279	.0048805
600	3228.8	5.7846	.0058124	3209.3	5.7493	.0055376	3189.9	5.7147	.0052845	3170.7	5.6809	.0050509

TABLE 3 WATER AND STEAM

	p(MPa) = 52.000			= 54.000			= 56.000			= 58.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3270.1	5.8317	.0059880	3251.6	5.7975	.0057095	3233.1	5.7640	.0054528	3214.8	5.7312	.0052157
620	3310.0	5.8767	.0061582	3292.4	5.8435	.0058762	3274.9	5.8110	.0056160	3257.5	5.7792	.0053755
630	3348.8	5.9199	.0063238	3332.0	5.8876	.0060381	3315.3	5.8560	.0057744	3298.7	5.8251	.0055335
640	3386.6	5.9614	.0064850	3370.5	5.9299	.0061957	3354.5	5.8992	.0059285	3338.6	5.8691	.0056813
650	3423.4	6.0016	.0066424	3408.0	5.9708	.0063494	3392.7	5.9408	.0060788	3377.5	5.9114	.0058283
660	3459.4	6.0404	.0067963	3444.7	6.0103	.0064997	3430.0	5.9809	.0062256	3415.4	5.9522	.0059718
670	3494.8	6.0781	.0069471	3480.6	6.0486	.0066468	3466.5	6.0198	.0063693	3452.4	5.9917	.0061122
680	3529.5	6.1147	.0070949	3515.8	6.0858	.0067910	3502.2	6.0575	.0065100	3488.7	6.0300	.0062497
690	3563.7	6.1503	.0072400	3550.5	6.1219	.0069325	3537.4	6.0942	.0066481	3524.4	6.0672	.0063845
700	3597.4	6.1851	.0073826	3584.6	6.1572	.0070715	3572.0	6.1300	.0067838	3559.4	6.1034	.0065169
710	3630.6	6.2191	.0075229	3618.3	6.1916	.0072082	3606.1	6.1649	.0069171	3594.0	6.1387	.0066471
720	3663.5	6.2524	.0076610	3651.6	6.2253	.0073428	3639.8	6.1989	.0070484	3628.0	6.1732	.0067752
730	3696.0	6.2849	.0077971	3684.5	6.2583	.0074754	3673.1	6.2323	.0071776	3661.7	6.2069	.0069013
740	3728.2	6.3169	.0079313	3717.0	6.2906	.0076061	3706.0	6.2649	.0073050	3695.0	6.2400	.0070256
750	3760.1	6.3482	.0080637	3749.3	6.3223	.0077351	3738.6	6.2970	.0074307	3728.0	6.2723	.0071481
760	3791.7	6.3790	.0081944	3781.3	6.3534	.0078623	3770.9	6.3284	.0075546	3760.6	6.3041	.0072693
770	3823.1	6.4092	.0083235	3813.0	6.3839	.0079879	3803.0	6.3593	.0076770	3793.0	6.3353	.0073883
780	3854.3	6.4390	.0084510	3844.5	6.4140	.0081120	3834.8	6.3896	.0077979	3825.1	6.3659	.0075061
790	3885.3	6.4683	.0085771	3875.8	6.4435	.0082346	3866.4	6.4195	.0079173	3857.0	6.3961	.0076225
800	3916.1	6.4971	.0087017	3906.9	6.4726	.0083558	3897.7	6.4489	.0080353	3888.7	6.4257	.0077376

TABLE 3 WATER AND STEAM

	p(MPa) = 60.000			= 62.000			= 64.000			= 66.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	58.8	-.0012	.0009723	60.7	-.0014	.0009715	62.6	-.0016	.0009706	64.5	-.0019	.0009698
10	98.7	.1420	.0009740	100.5	.1416	.0009732	102.3	.1412	.0009724	104.1	.1407	.0009716
20	138.9	.2815	.0009765	140.6	.2810	.0009757	142.4	.2804	.0009749	144.2	.2798	.0009742
30	179.3	.4170	.0009796	181.0	.4164	.0009789	182.8	.4157	.0009781	184.5	.4150	.0009774
40	219.8	.5486	.0009834	221.5	.5478	.0009826	223.2	.5470	.0009819	224.9	.5462	.0009811
50	260.4	.6762	.0009876	262.1	.6753	.0009868	263.8	.6744	.0009861	265.4	.6735	.0009853
60	301.1	.8002	.0009923	302.7	.7992	.0009915	304.4	.7982	.0009908	306.0	.7972	.0009900
70	341.8	.9207	.0009975	343.4	.9196	.0009967	345.1	.9185	.0009959	346.7	.9174	.0009952
80	382.6	1.0379	.0010031	384.2	1.0367	.0010023	385.8	1.0356	.0010015	387.4	1.0344	.0010008
90	423.5	1.1520	.0010092	425.1	1.1508	.0010084	426.6	1.1495	.0010076	428.2	1.1483	.0010068
100	464.5	1.2633	.0010157	466.0	1.2620	.0010149	467.5	1.2606	.0010141	469.0	1.2593	.0010132
110	505.5	1.3718	.0010227	507.0	1.3704	.0010218	508.5	1.3690	.0010210	510.0	1.3676	.0010201
120	546.6	1.4778	.0010301	548.1	1.4763	.0010292	549.6	1.4748	.0010283	551.0	1.4733	.0010275
130	587.9	1.5814	.0010380	589.3	1.5798	.0010371	590.7	1.5782	.0010361	592.2	1.5766	.0010352
140	629.2	1.6828	.0010464	630.6	1.6811	.0010454	632.0	1.6794	.0010444	633.4	1.6777	.0010434
150	670.7	1.7820	.0010552	672.1	1.7802	.0010542	673.4	1.7784	.0010531	674.8	1.7766	.0010521
160	712.4	1.8793	.0010645	713.7	1.8774	.0010634	715.0	1.8755	.0010623	716.3	1.8736	.0010613
170	754.2	1.9747	.0010744	755.4	1.9727	.0010732	756.7	1.9707	.0010721	758.0	1.9687	.0010709
180	796.2	2.0684	.0010847	797.4	2.0663	.0010835	798.6	2.0642	.0010823	799.8	2.0621	.0010811
190	838.4	2.1605	.0010957	839.5	2.1582	.0010944	840.7	2.1560	.0010931	841.8	2.1538	.0010919
200	880.8	2.2511	.0011073	881.9	2.2487	.0011059	882.9	2.2463	.0011046	884.1	2.2440	.0011032
210	923.4	2.3402	.0011195	924.4	2.3377	.0011181	925.5	2.3352	.0011166	926.5	2.3328	.0011152
220	966.3	2.4281	.0011325	967.3	2.4255	.0011309	968.2	2.4228	.0011293	969.2	2.4202	.0011278
230	1009.5	2.5148	.0011462	1010.4	2.5120	.0011445	1011.3	2.5092	.0011428	1012.2	2.5065	.0011411
240	1053.0	2.6005	.0011607	1053.8	2.5975	.0011588	1054.6	2.5945	.0011570	1055.4	2.5916	.0011552
250	1096.9	2.6851	.0011761	1097.6	2.6820	.0011741	1098.3	2.6789	.0011721	1099.0	2.6758	.0011701
260	1141.2	2.7690	.0011924	1141.7	2.7656	.0011903	1142.4	2.7623	.0011881	1143.0	2.7590	.0011860
270	1185.9	2.8521	.0012099	1186.3	2.8485	.0012075	1186.8	2.8449	.0012051	1187.4	2.8415	.0012028
280	1231.1	2.9345	.0012285	1231.4	2.9307	.0012258	1231.8	2.9269	.0012232	1232.2	2.9232	.0012207
290	1276.8	3.0165	.0012484	1277.0	3.0124	.0012455	1277.2	3.0084	.0012426	1277.5	3.0044	.0012398
300	1323.2	3.0981	.0012698	1323.2	3.0937	.0012665	1323.2	3.0893	.0012633	1323.3	3.0851	.0012602

TABLE 3 WATER AND STEAM

p(MPa)	= 60.000			= 62.000			= 64.000			= 66.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1370.2	3.1794	.0012929	1370.0	3.1746	.0012892	1369.8	3.1700	.0012856	1369.7	3.1654	.0012821
320	1418.0	3.2606	.0013179	1417.5	3.2554	.0013137	1417.1	3.2504	.0013097	1416.8	3.2454	.0013057
330	1466.6	3.3419	.0013451	1465.9	3.3363	.0013404	1465.2	3.3308	.0013358	1464.6	3.3254	.0013314
340	1516.3	3.4236	.0013751	1515.2	3.4174	.0013697	1514.2	3.4113	.0013645	1513.3	3.4054	.0013594
350	1567.1	3.5059	.0014083	1565.6	3.4990	.0014021	1564.2	3.4923	.0013960	1562.9	3.4857	.0013903
360	1622.8	3.5948	.0014444	1621.0	3.5875	.0014371	1619.4	3.5804	.0014302	1617.8	3.5735	.0014235
370	1672.3	3.6725	.0014836	1670.0	3.6643	.0014751	1667.9	3.6564	.0014670	1665.9	3.6488	.0014593
380	1728.4	3.7589	.0015275	1725.5	3.7498	.0015174	1722.8	3.7411	.0015078	1720.3	3.7327	.0014987
390	1786.9	3.8478	.0015767	1783.3	3.8376	.0015645	1779.9	3.8279	.0015530	1776.8	3.8185	.0015422
400	1847.3	3.9383	.0016324	1842.7	3.9267	.0016176	1838.5	3.9156	.0016037	1834.7	3.9051	.0015907
410	1909.9	4.0306	.0016964	1904.2	4.0173	.0016780	1898.9	4.0047	.0016610	1894.1	3.9927	.0016453
420	1975.0	4.1252	.0017709	1967.7	4.1096	.0017477	1961.1	4.0951	.0017266	1955.1	4.0815	.0017073
430	2042.8	4.2222	.0018584	2033.6	4.2040	.0018288	2025.4	4.1871	.0018023	2017.9	4.1714	.0017782
440	2113.5	4.3221	.0019618	2102.0	4.3006	.0019238	2091.8	4.2809	.0018901	2082.6	4.2627	.0018599
450	2187.1	4.4246	.0020837	2173.0	4.3994	.0020348	2160.5	4.3766	.0019919	2149.3	4.3556	.0019539
460	2263.2	4.5291	.0022256	2246.4	4.5002	.0021634	2231.4	4.4739	.0021093	2217.9	4.4499	.0020618
470	2340.9	4.6344	.0023870	2321.5	4.6019	.0023099	2304.0	4.5723	.0022428	2288.4	4.5453	.0021841
480	2418.8	4.7385	.0025646	2397.3	4.7032	.0024721	2377.7	4.6708	.0023913	2360.0	4.6410	.0023205
490	2495.7	4.8400	.0027542	2472.6	4.8026	.0026467	2451.4	4.7681	.0025523	2432.1	4.7361	.0024691
500	2570.6	4.9374	.0029516	2546.5	4.8988	.0028298	2524.3	4.8629	.0027224	2503.7	4.8293	.0026272
510	2642.7	5.0301	.0031527	2618.2	4.9909	.0030180	2595.3	4.9542	.0028984	2574.0	4.9197	.0027919
520	2712.6	5.1189	.0033585	2687.6	5.0791	.0032104	2664.1	5.0414	.0030775	2642.4	5.0064	.0029605
530	2777.4	5.2001	.0035592	2753.3	5.1614	.0034017	2730.3	5.1245	.0032602	2708.4	5.0893	.0031327
540	2838.3	5.2755	.0037553	2814.8	5.2375	.0035891	2792.3	5.2012	.0034389	2770.8	5.1665	.0033033
550	2896.2	5.3463	.0039474	2873.3	5.3090	.0037734	2851.2	5.2732	.0036152	2830.1	5.2389	.0034714
560	2951.7	5.4132	.0041353	2929.4	5.3767	.0039544	2907.8	5.3415	.0037891	2887.0	5.3077	.0036383
570	3004.8	5.4766	.0043183	2983.3	5.4410	.0041316	2962.3	5.4066	.0039602	2942.0	5.3733	.0038030
580	3055.8	5.5367	.0044960	3035.1	5.5021	.0043044	3014.9	5.4685	.0041278	2995.1	5.4359	.0039651
590	3104.7	5.5937	.0046683	3084.9	5.5602	.0044723	3065.5	5.5275	.0042912	3046.4	5.4957	.0041238
600	3151.6	5.6477	.0048350	3132.7	5.6153	.0046352	3114.1	5.5836	.0044501	3095.9	5.5526	.0042786

TABLE 3 WATER AND STEAM

p(MPa)	= 60.000			= 62.000			= 64.000			= 66.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3196.7	5.6991	.0049963	3178.7	5.6677	.0047930	3161.0	5.6369	.0046044	3143.5	5.6069	.0044292
620	3240.2	5.7480	.0051527	3223.1	5.7176	.0049461	3206.1	5.6877	.0047542	3189.4	5.6585	.0045756
630	3282.2	5.7948	.0053045	3265.8	5.7652	.0050947	3249.6	5.7362	.0048996	3233.6	5.7078	.0047180
640	3322.9	5.8396	.0054521	3307.2	5.8108	.0052392	3291.8	5.7826	.0050411	3276.4	5.7550	.0048565
650	3362.4	5.8827	.0055959	3347.4	5.8546	.0053800	3332.6	5.8271	.0051789	3317.9	5.8001	.0049914
660	3400.9	5.9242	.0057363	3386.5	5.8967	.0055173	3372.3	5.8699	.0053133	3358.2	5.8436	.0051230
670	3438.5	5.9642	.0058735	3424.7	5.9374	.0056515	3411.0	5.9111	.0054446	3397.5	5.8854	.0052515
680	3475.3	6.0031	.0060079	3462.0	5.9768	.0057829	3448.9	5.9510	.0055732	3435.8	5.9259	.0053773
690	3511.5	6.0408	.0061397	3498.6	6.0150	.0059117	3485.9	5.9897	.0056992	3473.4	5.9651	.0055006
700	3547.0	6.0775	.0062690	3534.6	6.0521	.0060382	3522.3	6.0273	.0058228	3510.2	6.0031	.0056216
710	3581.9	6.1132	.0063961	3570.0	6.0883	.0061624	3558.1	6.0639	.0059443	3546.4	6.0401	.0057404
720	3616.4	6.1481	.0065212	3604.8	6.1236	.0062846	3593.4	6.0996	.0060637	3582.0	6.0762	.0058572
730	3650.4	6.1822	.0066443	3639.3	6.1580	.0064048	3628.2	6.1344	.0061813	3617.2	6.1114	.0059722
740	3684.1	6.2156	.0067656	3673.3	6.1918	.0065233	3662.5	6.1685	.0062971	3651.9	6.1458	.0060854
750	3717.4	6.2483	.0068852	3706.9	6.2248	.0066401	3696.5	6.2019	.0064112	3686.2	6.1795	.0061970
760	3750.4	6.2804	.0070032	3740.2	6.2572	.0067553	3730.1	6.2346	.0065238	3720.1	6.2125	.0063073
770	3783.1	6.3119	.0071196	3773.2	6.2890	.0068690	3763.4	6.2667	.0066348	3753.7	6.2448	.0064156
780	3815.5	6.3428	.0072346	3805.9	6.3202	.0069813	3796.4	6.2982	.0067445	3787.0	6.2766	.0065228
790	3847.7	6.3732	.0073481	3838.4	6.3509	.0070921	3829.2	6.3291	.0068528	3820.0	6.3078	.0066286
800	3879.6	6.4031	.0074603	3870.6	6.3811	.0072016	3861.7	6.3595	.0069597	3852.8	6.3385	.0067332

TABLE 3 WATER AND STEAM

p(MPa)	= 68.000			= 70.000			= 72.000			= 74.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	66.3	-.0021	.0009690	68.2	-.0024	.0009682	70.1	-.0026	.0009673	71.9	-.0029	.0009665
10	105.9	.1403	.0009708	107.8	.1398	.0009700	109.6	.1393	.0009692	111.4	.1389	.0009684
20	146.0	.2792	.0009734	147.7	.2786	.0009726	149.5	.2780	.0009719	151.3	.2774	.0009711
30	186.2	.4143	.0009766	188.0	.4136	.0009759	189.7	.4129	.0009752	191.5	.4122	.0009744
40	226.6	.5454	.0009804	228.4	.5446	.0009797	230.1	.5438	.0009789	231.8	.5430	.0009782
50	267.1	.6727	.0009846	268.8	.6718	.0009839	270.5	.6709	.0009831	272.2	.6700	.0009824
60	307.7	.7962	.0009893	309.3	.7953	.0009885	311.0	.7943	.0009878	312.6	.7933	.0009871
70	348.3	.9164	.0009944	349.9	.9153	.0009937	351.5	.9142	.0009929	353.2	.9132	.0009922
80	389.0	1.0332	.0010000	390.6	1.0321	.0009992	392.2	1.0309	.0009984	393.8	1.0298	.0009977
90	429.7	1.1470	.0010060	431.3	1.1458	.0010052	432.9	1.1446	.0010044	434.4	1.1433	.0010036
100	470.6	1.2579	.0010124	472.1	1.2566	.0010116	473.6	1.2553	.0010108	475.2	1.2540	.0010100
110	511.5	1.3661	.0010193	513.0	1.3647	.0010184	514.5	1.3633	.0010176	516.0	1.3619	.0010168
120	552.5	1.4718	.0010266	553.9	1.4703	.0010257	555.4	1.4688	.0010248	556.9	1.4673	.0010240
130	593.6	1.5750	.0010343	595.0	1.5734	.0010334	596.4	1.5718	.0010325	597.9	1.5703	.0010316
140	634.8	1.6760	.0010425	636.2	1.6743	.0010415	637.6	1.6726	.0010406	639.0	1.6710	.0010395
150	676.1	1.7749	.0010511	677.5	1.7731	.0010501	678.8	1.7713	.0010491	680.2	1.7696	.0010481
160	717.6	1.8717	.0010602	718.9	1.8699	.0010592	720.2	1.8680	.0010581	721.5	1.8662	.0010571
170	759.2	1.9667	.0010698	760.5	1.9648	.0010687	761.8	1.9628	.0010676	763.0	1.9609	.0010665
180	801.0	2.0600	.0010799	802.2	2.0579	.0010788	803.5	2.0559	.0010776	804.7	2.0538	.0010765
190	843.0	2.1516	.0010906	844.2	2.1494	.0010894	845.3	2.1472	.0010881	846.5	2.1451	.0010869
200	885.2	2.2417	.0011019	886.3	2.2394	.0011005	887.4	2.2371	.0010992	888.5	2.2348	.0010979
210	927.5	2.3303	.0011137	928.6	2.3279	.0011123	929.7	2.3255	.0011109	930.7	2.3231	.0011095
220	970.2	2.4176	.0011262	971.2	2.4151	.0011247	972.2	2.4125	.0011232	973.2	2.4100	.0011216
230	1013.1	2.5037	.0011395	1014.0	2.5010	.0011378	1014.9	2.4984	.0011362	1015.8	2.4957	.0011347
240	1056.2	2.5887	.0011534	1057.1	2.5859	.0011517	1057.9	2.5830	.0011500	1058.8	2.5802	.0011463
250	1099.8	2.6727	.0011682	1100.5	2.6697	.0011663	1101.3	2.6667	.0011645	1102.0	2.6637	.0011626
260	1143.6	2.7558	.0011839	1144.3	2.7526	.0011818	1144.9	2.7494	.0011798	1145.6	2.7462	.0011778
270	1187.9	2.8380	.0012005	1188.4	2.8346	.0011983	1189.0	2.8312	.0011961	1189.6	2.8279	.0011939
280	1232.6	2.9195	.0012182	1233.0	2.9159	.0012157	1233.5	2.9124	.0012133	1233.9	2.9088	.0012109
290	1277.7	3.0005	.0012370	1278.0	2.9966	.0012343	1278.4	2.9928	.0012317	1278.7	2.9890	.0012290
300	1323.4	3.0809	.0012571	1323.6	3.0767	.0012541	1323.7	3.0727	.0012512	1323.9	3.0687	.0012483

TABLE 3 WATER AND STEAM

p(MPa)	= 68.000			= 70.000			= 72.000			= 74.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1369.7	3.1609	.0012787	1369.6	3.1564	.0012754	1369.6	3.1521	.0012721	1369.7	3.1478	.0012689
320	1416.5	3.2405	.0013019	1416.3	3.2358	.0012982	1416.1	3.2311	.0012946	1415.9	3.2264	.0012910
330	1464.1	3.3201	.0013271	1463.6	3.3149	.0013229	1463.2	3.3098	.0013188	1462.8	3.3048	.0013148
340	1512.4	3.3996	.0013545	1511.7	3.3939	.0013498	1510.9	3.3883	.0013452	1510.3	3.3829	.0013407
350	1561.7	3.4793	.0013847	1560.6	3.4730	.0013793	1559.5	3.4669	.0013740	1558.5	3.4609	.0013690
360	1616.4	3.5667	.0014171	1615.1	3.5602	.0014110	1613.8	3.5537	.0014051	1612.7	3.5475	.0013993
370	1664.1	3.6414	.0014519	1662.4	3.6342	.0014448	1660.8	3.6273	.0014379	1659.3	3.6205	.0014314
380	1718.0	3.7245	.0014900	1715.8	3.7167	.0014818	1713.8	3.7091	.0014739	1711.9	3.7017	.0014663
390	1773.9	3.8095	.0015320	1771.2	3.8009	.0015223	1768.7	3.7925	.0015131	1766.4	3.7844	.0015043
400	1831.1	3.8951	.0015785	1827.8	3.8855	.0015671	1824.7	3.8763	.0015562	1821.8	3.8674	.0015459
410	1889.6	3.9814	.0016306	1885.5	3.9706	.0016169	1881.7	3.9603	.0016040	1878.1	3.9505	.0015919
420	1949.6	4.0686	.0016894	1944.5	4.0564	.0016728	1939.8	4.0448	.0016574	1935.4	4.0337	.0016430
430	2011.1	4.1567	.0017563	2004.8	4.1428	.0017361	1999.1	4.1297	.0017175	1993.8	4.1173	.0017002
440	2074.2	4.2458	.0018327	2066.6	4.2300	.0018079	2059.6	4.2152	.0017853	2053.2	4.2012	.0017644
450	2139.1	4.3362	.0019200	2129.9	4.3182	.0018895	2121.5	4.3014	.0018619	2113.8	4.2856	.0018366
460	2205.8	4.4278	.0020197	2194.8	4.4073	.0019821	2184.9	4.3884	.0019482	2175.7	4.3707	.0019176
470	2274.2	4.5204	.0021323	2261.4	4.4975	.0020863	2249.7	4.4762	.0020452	2239.1	4.4565	.0020081
480	2343.9	4.6136	.0022580	2329.3	4.5882	.0022025	2315.9	4.5647	.0021530	2303.7	4.5429	.0021066
490	2414.3	4.7065	.0023954	2398.1	4.6790	.0023299	2383.2	4.6534	.0022714	2369.5	4.6296	.0022188
500	2484.7	4.7980	.0025425	2467.1	4.7688	.0024668	2450.9	4.7416	.0023991	2435.9	4.7161	.0023381
510	2554.1	4.8873	.0026967	2535.6	4.8569	.0026112	2518.4	4.8283	.0025344	2502.3	4.8015	.0024650
520	2622.0	4.9734	.0028555	2602.9	4.9422	.0027608	2585.0	4.9128	.0026753	2568.2	4.8850	.0025979
530	2687.6	5.0557	.0030177	2668.3	5.0242	.0029135	2650.0	4.9943	.0028199	2632.7	4.9658	.0027348
540	2750.4	5.1335	.0031800	2731.1	5.1020	.0030685	2712.7	5.0719	.0029672	2695.4	5.0434	.0028743
550	2809.9	5.2061	.0033407	2790.7	5.1748	.0032218	2772.4	5.1449	.0031133	2755.0	5.1164	.0030143
560	2867.1	5.2752	.0035004	2848.0	5.2440	.0033745	2829.7	5.2142	.0032593	2812.4	5.1856	.0031537
570	2922.4	5.3412	.0036588	2903.5	5.3103	.0035265	2885.4	5.2806	.0034051	2868.1	5.2521	.0032935
580	2976.0	5.4044	.0038152	2957.4	5.3739	.0036772	2939.6	5.3444	.0035500	2922.4	5.3161	.0034328
590	3027.8	5.4648	.0039690	3009.8	5.4348	.0038259	2992.2	5.4058	.0036935	2975.3	5.3778	.0035712
600	3077.9	5.5225	.0041195	3060.4	5.4931	.0039719	3043.3	5.4647	.0038350	3026.7	5.4370	.0037080

TABLE 3 WATER AND STEAM

	p(MPa) = 68.000			= 70.000			= 72.000			= 74.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3126.2	5.5775	.0042664	3109.3	5.5489	.0041149	3092.8	5.5210	.0039740	3076.7	5.4939	.0038429
620	3172.8	5.6300	.0044094	3156.6	5.6021	.0042545	3140.6	5.5749	.0041100	3125.0	5.5483	.0039752
630	3217.8	5.6801	.0045486	3202.2	5.6529	.0043906	3186.9	5.6263	.0042429	3171.8	5.6004	.0041348
640	3261.3	5.7279	.0046842	3246.3	5.7015	.0045232	3231.6	5.6756	.0043725	3217.0	5.6502	.0042315
650	3303.4	5.7738	.0048162	3289.0	5.7480	.0046524	3274.8	5.7227	.0044991	3260.9	5.6980	.0043553
660	3344.3	5.8178	.0049451	3330.5	5.7926	.0047786	3316.8	5.7680	.0046226	3303.4	5.7438	.0044762
670	3384.1	5.8603	.0050710	3370.8	5.8356	.0049019	3357.7	5.8115	.0047434	3344.7	5.7878	.0045945
680	3422.9	5.9012	.0051942	3410.1	5.8771	.0050225	3397.5	5.8535	.0048615	3385.0	5.8303	.0047103
690	3460.9	5.9409	.0053148	3448.6	5.9172	.0051407	3436.4	5.8941	.0049773	3424.3	5.8714	.0048237
700	3498.2	5.9794	.0054332	3486.3	5.9562	.0052566	3474.5	5.9334	.0050909	3462.8	5.9112	.0049350
710	3534.8	6.0168	.0055495	3523.3	5.9940	.0053705	3511.9	5.9717	.0052023	3500.6	5.9498	.0050442
720	3570.8	6.0532	.0056638	3559.7	6.0308	.0054824	3548.6	6.0089	.0053119	3537.7	5.9873	.0051516
730	3606.3	6.0888	.0057763	3595.5	6.0667	.0055925	3584.8	6.0451	.0054197	3574.3	6.0239	.0052572
740	3641.3	6.1236	.0058870	3630.9	6.1018	.0057008	3620.5	6.0805	.0055259	3610.3	6.0597	.0053611
750	3675.9	6.1576	.0059962	3665.8	6.1361	.0058077	3655.8	6.1151	.0056304	3645.8	6.0946	.0054636
760	3710.2	6.1909	.0061038	3700.3	6.1697	.0059130	3690.6	6.1490	.0057335	3681.0	6.1287	.0055646
770	3744.1	6.2235	.0062100	3734.5	6.2026	.0060169	3725.1	6.1822	.0058353	3715.7	6.1622	.0056642
780	3777.7	6.2556	.0063148	3768.4	6.2350	.0061195	3759.2	6.2148	.0059357	3750.1	6.1950	.0057625
790	3811.0	6.2870	.0064183	3802.0	6.2667	.0062207	3793.0	6.2468	.0060348	3784.2	6.2273	.0058596
800	3844.0	6.3180	.0065206	3835.3	6.2979	.0063208	3826.6	6.2782	.0061327	3818.0	6.2589	.0059555

TABLE 3 WATER AND STEAM

	p(MPa) = 76.000			= 78.000			= 80.000			= 82.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	73.8	-.0032	.0009657	75.7	-.0034	.0009649	77.5	-.0037	.0009641	79.4	-.0040	.0009633
10	113.2	.1384	.0009676	115.0	.1379	.0009669	116.8	.1374	.0009661	118.6	.1369	.0009653
20	153.0	.2768	.0009704	154.8	.2762	.0009696	156.6	.2756	.0009689	158.3	.2749	.0009682
30	193.2	.4115	.0009737	194.9	.4107	.0009730	196.6	.4100	.0009722	198.4	.4093	.0009715
40	233.5	.5422	.0009775	235.2	.5414	.0009768	236.9	.5406	.0009760	238.6	.5398	.0009753
50	273.8	.6691	.0009817	275.5	.6682	.0009810	277.2	.6673	.0009803	278.9	.6664	.0009795
60	314.3	.7923	.0009863	315.9	.7914	.0009856	317.6	.7904	.0009849	319.2	.7894	.0009842
70	354.8	.9121	.0009914	356.4	.9110	.0009907	358.0	.9100	.0009900	359.6	.9089	.0009892
80	395.3	1.0286	.0009969	396.9	1.0275	.0009962	398.5	1.0264	.0009954	400.1	1.0252	.0009947
90	436.0	1.1421	.0010029	437.5	1.1409	.0010021	439.1	1.1396	.0010013	440.7	1.1384	.0010006
100	476.7	1.2527	.0010092	478.2	1.2514	.0010084	479.7	1.2501	.0010076	481.3	1.2488	.0010068
110	517.5	1.3605	.0010159	519.0	1.3591	.0010151	520.5	1.3578	.0010143	522.0	1.3564	.0010135
120	558.3	1.4658	.0010231	559.8	1.4643	.0010222	561.3	1.4629	.0010214	562.7	1.4614	.0010206
130	599.3	1.5687	.0010307	600.7	1.5672	.0010298	602.2	1.5656	.0010289	603.6	1.5641	.0010280
140	640.4	1.6693	.0010387	641.8	1.6677	.0010378	643.2	1.6661	.0010368	644.6	1.6644	.0010359
150	681.6	1.7678	.0010471	682.9	1.7661	.0010462	684.3	1.7644	.0010452	685.6	1.7627	.0010442
160	722.9	1.8643	.0010561	724.2	1.8625	.0010550	725.5	1.8607	.0010540	726.8	1.8589	.0010530
170	764.3	1.9589	.0010654	765.6	1.9570	.0010644	766.9	1.9551	.0010633	768.2	1.9532	.0010622
180	805.9	2.0518	.0010753	807.2	2.0498	.0010742	808.4	2.0478	.0010731	809.6	2.0458	.0010719
190	847.7	2.1430	.0010857	848.9	2.1408	.0010845	850.1	2.1387	.0010833	851.3	2.1366	.0010821
200	889.6	2.2326	.0010966	890.8	2.2303	.0010954	891.9	2.2281	.0010941	893.1	2.2259	.0010929
210	931.8	2.3207	.0011082	932.9	2.3184	.0011068	934.0	2.3160	.0011055	935.0	2.3137	.0011041
220	974.2	2.4075	.0011203	975.2	2.4050	.0011189	976.2	2.4026	.0011174	977.2	2.4001	.0011160
230	1016.8	2.4931	.0011331	1017.7	2.4904	.0011315	1018.7	2.4879	.0011300	1019.6	2.4853	.0011285
240	1059.7	2.5774	.0011466	1060.5	2.5747	.0011449	1061.4	2.5720	.0011433	1062.3	2.5692	.0011417
250	1102.8	2.6608	.0011608	1103.6	2.6579	.0011590	1104.4	2.6550	.0011573	1105.2	2.6521	.0011555
260	1146.3	2.7431	.0011759	1147.0	2.7401	.0011739	1147.8	2.7370	.0011720	1148.5	2.7340	.0011701
270	1190.2	2.8246	.0011918	1190.8	2.8214	.0011897	1191.4	2.8181	.0011876	1192.1	2.8150	.0011856
280	1234.4	2.9053	.0012086	1234.9	2.9019	.0012063	1235.4	2.8985	.0012041	1236.0	2.8951	.0012019
290	1279.1	2.9853	.0012265	1279.5	2.9817	.0012240	1279.9	2.9780	.0012215	1280.3	2.9745	.0012191
300	1324.2	3.0647	.0012455	1324.4	3.0608	.0012428	1324.7	3.0570	.0012401	1325.0	3.0532	.0012374

TABLE 3 WATER AND STEAM

	p(MPa) = 76.000			= 78.000			= 80.000			= 82.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1369.7	3.1435	.0012658	1369.8	3.1394	.0012628	1370.0	3.1353	.0012598	1370.1	3.1312	.0012569
320	1415.8	3.2219	.0012876	1415.7	3.2174	.0012842	1415.7	3.2130	.0012809	1415.7	3.2087	.0012776
330	1462.5	3.2998	.0013110	1462.2	3.2950	.0013072	1461.9	3.2903	.0013035	1461.7	3.2856	.0012999
340	1509.7	3.3775	.0013364	1509.1	3.3723	.0013321	1508.6	3.3671	.0013280	1508.2	3.3620	.0013240
350	1557.6	3.4550	.0013641	1556.7	3.4492	.0013593	1555.9	3.4436	.0013547	1555.2	3.4381	.0013503
360	1611.6	3.5414	.0013938	1610.6	3.5354	.0013884	1609.7	3.5296	.0013833	1608.8	3.5238	.0013782
370	1657.9	3.6139	.0014251	1656.6	3.6074	.0014190	1655.4	3.6012	.0014131	1654.3	3.5950	.0014075
380	1710.1	3.6945	.0014591	1708.5	3.6875	.0014521	1707.0	3.6807	.0014454	1705.5	3.6741	.0014389
390	1764.2	3.7766	.0014959	1762.2	3.7691	.0014879	1760.3	3.7617	.0014802	1758.5	3.7546	.0014728
400	1819.1	3.8588	.0015361	1816.6	3.8505	.0015268	1814.2	3.8425	.0015180	1812.0	3.8347	.0015095
410	1874.8	3.9410	.0015804	1871.7	3.9318	.0015695	1868.8	3.9230	.0015592	1866.2	3.9145	.0015494
420	1931.4	4.0232	.0016294	1927.6	4.0131	.0016167	1924.1	4.0033	.0016046	1920.8	3.9940	.0015932
430	1988.8	4.1055	.0016841	1984.3	4.0942	.0016690	1980.0	4.0834	.0016548	1976.0	4.0730	.0016414
440	2047.2	4.1879	.0017451	2041.7	4.1753	.0017272	2036.6	4.1633	.0017104	2031.8	4.1519	.0016948
450	2106.7	4.2707	.0018134	2100.2	4.2567	.0017920	2094.1	4.2434	.0017722	2088.4	4.2307	.0017537
460	2167.4	4.3541	.0018897	2159.7	4.3384	.0018641	2152.5	4.3237	.0018405	2145.9	4.3097	.0018187
470	2229.3	4.4380	.0019746	2220.4	4.4207	.0019440	2212.1	4.4043	.0019160	2204.5	4.3889	.0018903
480	2292.5	4.5225	.0020685	2282.3	4.5034	.0020322	2272.8	4.4855	.0019990	2264.1	4.4686	.0019687
490	2356.9	4.6074	.0021715	2345.3	4.5866	.0021287	2334.7	4.5671	.0020898	2324.8	4.5487	.0020542
500	2422.0	4.6922	.0022831	2409.2	4.6698	.0022333	2397.4	4.6488	.0021881	2386.4	4.6290	.0021468
510	2487.4	4.7762	.0024022	2473.6	4.7525	.0023453	2460.7	4.7301	.0022934	2448.7	4.7090	.0022460
520	2552.4	4.8587	.0025275	2537.7	4.8338	.0024634	2524.0	4.8104	.0024049	2511.1	4.7882	.0023514
530	2616.4	4.9388	.0026572	2601.1	4.9132	.0025863	2586.7	4.8889	.0025213	2573.1	4.8658	.0024617
540	2678.8	5.0160	.0027899	2663.0	4.9899	.0027125	2648.2	4.9650	.0026414	2634.1	4.9413	.0025759
550	2738.6	5.0892	.0029237	2723.2	5.0634	.0028408	2708.0	5.0382	.0027639	2693.6	5.0141	.0026929
560	2795.8	5.1583	.0030569	2780.1	5.1321	.0029678	2765.1	5.1072	.0028859	2750.9	5.0833	.0028104
570	2851.5	5.2247	.0031908	2835.6	5.1985	.0030961	2820.5	5.1733	.0030087	2806.0	5.1491	.0029278
580	2905.9	5.2889	.0033247	2890.1	5.2626	.0032248	2874.9	5.2374	.0031324	2860.3	5.2131	.0030467
590	2959.0	5.3507	.0034580	2943.3	5.3246	.0033532	2928.2	5.2995	.0032561	2913.7	5.2752	.0031659
600	3010.7	5.4103	.0035902	2995.2	5.3844	.0034808	2980.3	5.3595	.0033792	2965.9	5.3354	.0032847

TABLE 3 WATER AND STEAM

	p(MPa) = 76.000			= 78.000			= 80.000			= 82.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3061.0	5.4675	.0037208	3045.7	5.4920	.0036071	3031.0	5.4173	.0035013	3016.8	5.3934	.0034027
620	3109.7	5.5225	.0038494	3094.9	5.4973	.0037319	3080.4	5.4729	.0036222	3066.4	5.4493	.0035197
630	3157.0	5.5751	.0039756	3142.5	5.5504	.0038547	3128.4	5.5264	.0037415	3114.7	5.5030	.0036355
640	3202.8	5.6255	.0040993	3188.8	5.6013	.0039753	3175.0	5.5777	.0038590	3161.7	5.5547	.0037498
650	3247.1	5.6738	.0042203	3233.6	5.6501	.0040936	3220.3	5.6270	.0039744	3207.2	5.6044	.0038623
660	3290.1	5.7201	.0043387	3277.0	5.6969	.0042094	3264.2	5.6743	.0040876	3251.5	5.6521	.0039730
670	3331.9	5.7647	.0044545	3319.3	5.7420	.0043228	3306.9	5.7198	.0041987	3294.6	5.6980	.0040816
680	3372.7	5.8076	.0045680	3360.5	5.7854	.0044340	3348.4	5.7636	.0043076	3336.6	5.7423	.0041883
690	3412.4	5.8491	.0046792	3400.6	5.8273	.0045429	3389.0	5.8060	.0044144	3377.5	5.7850	.0042930
700	3451.3	5.8893	.0047882	3439.9	5.8679	.0046499	3428.7	5.8470	.0045193	3417.6	5.8264	.0043959
710	3489.5	5.9283	.0048953	3478.5	5.9073	.0047548	3467.6	5.8867	.0046222	3456.8	5.8665	.0044969
720	3526.9	5.9663	.0050005	3516.3	5.9456	.0048580	3505.7	5.9253	.0047234	3495.3	5.9055	.0045962
730	3563.8	6.0032	.0051040	3553.5	5.9829	.0049595	3543.3	5.9629	.0048230	3533.2	5.9434	.0046939
740	3600.1	6.0392	.0052059	3590.1	6.0192	.0050594	3580.2	5.9996	.0049209	3570.4	5.9803	.0047900
750	3636.0	6.0744	.0053063	3626.3	6.0547	.0051578	3616.7	6.0354	.0050174	3607.1	6.0164	.0048846
760	3671.4	6.1089	.0054052	3662.0	6.0894	.0052548	3652.6	6.0704	.0051125	3643.4	6.0517	.0049779
770	3706.4	6.1426	.0055028	3697.3	6.1234	.0053504	3688.2	6.1046	.0052063	3679.2	6.0862	.0050699
780	3741.1	6.1757	.0055991	3732.2	6.1568	.0054448	3723.4	6.1382	.0052989	3714.7	6.1200	.0051607
790	3775.5	6.2082	.0056942	3766.8	6.1895	.0055380	3758.2	6.1711	.0053902	3749.7	6.1531	.0052503
800	3809.5	6.2401	.0057882	3801.1	6.2216	.0056301	3792.8	6.2034	.0054805	3784.5	6.1857	.0053388

TABLE 3 WATER AND STEAM

p(MPa)	= 84.000			= 86.000			= 88.000			= 90.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	81.2	-.0043	.0009625	83.0	-.0046	.0009617	84.9	-.0049	.0009610	86.7	-.0052	.0009602
10	120.3	.1364	.0009646	122.1	.1359	.0009638	123.9	.1354	.0009631	125.7	.1349	.0009623
20	160.1	.2743	.0009674	161.8	.2737	.0009667	163.6	.2731	.0009660	165.3	.2724	.0009652
30	200.1	.4086	.0009708	201.8	.4079	.0009701	203.5	.4071	.0009694	205.3	.4064	.0009687
40	240.3	.5390	.0009746	242.0	.5382	.0009739	243.7	.5374	.0009732	245.4	.5366	.0009725
50	280.5	.6656	.0009788	282.2	.6647	.0009781	283.9	.6638	.0009774	285.6	.6629	.0009767
60	320.9	.7885	.0009835	322.5	.7875	.0009828	324.2	.7865	.0009821	325.8	.7856	.0009814
70	361.3	.9079	.0009885	362.9	.9068	.0009878	364.5	.9058	.0009871	366.1	.9048	.0009864
80	401.7	1.0241	.0009940	403.3	1.0230	.0009932	404.9	1.0218	.0009925	406.5	1.0207	.0009918
90	442.2	1.1372	.0009998	443.8	1.1360	.0009990	445.3	1.1348	.0009983	446.9	1.1336	.0009975
100	482.8	1.2475	.0010060	484.3	1.2462	.0010053	485.9	1.2449	.0010045	487.4	1.2436	.0010037
110	523.5	1.3550	.0010127	525.0	1.3536	.0010119	526.5	1.3523	.0010111	528.0	1.3509	.0010103
120	564.2	1.4600	.0010197	565.7	1.4585	.0010189	567.2	1.4571	.0010181	568.6	1.4557	.0010172
130	605.0	1.5625	.0010272	606.5	1.5610	.0010263	607.9	1.5595	.0010254	609.4	1.5580	.0010246
140	646.0	1.6628	.0010350	647.4	1.6612	.0010341	648.8	1.6596	.0010332	650.2	1.6580	.0010323
150	687.0	1.7610	.0010433	688.4	1.7593	.0010424	689.7	1.7576	.0010414	691.1	1.7559	.0010405
160	728.2	1.8571	.0010520	729.5	1.8553	.0010510	730.8	1.8535	.0010500	732.2	1.8518	.0010491
170	769.5	1.9513	.0010612	770.7	1.9495	.0010601	772.0	1.9476	.0010591	773.3	1.9457	.0010581
180	810.9	2.0438	.0010708	812.1	2.0418	.0010697	813.4	2.0398	.0010686	814.6	2.0379	.0010676
190	852.5	2.1345	.0010810	853.7	2.1325	.0010798	854.9	2.1304	.0010787	856.1	2.1284	.0010775
200	894.2	2.2237	.0010916	895.4	2.2215	.0010904	896.5	2.2194	.0010892	897.7	2.2172	.0010880
210	936.1	2.3114	.0011028	937.2	2.3091	.0011015	938.3	2.3068	.0011002	939.4	2.3046	.0010990
220	978.3	2.3977	.0011146	979.3	2.3953	.0011132	980.4	2.3929	.0011119	981.4	2.3905	.0011105
230	1020.6	2.4827	.0011270	1021.6	2.4802	.0011255	1022.6	2.4777	.0011241	1023.6	2.4752	.0011226
240	1063.2	2.5666	.0011401	1064.1	2.5639	.0011385	1065.0	2.5612	.0011369	1066.0	2.5586	.0011354
250	1106.1	2.6493	.0011538	1106.9	2.6465	.0011521	1107.8	2.6437	.0011504	1108.6	2.6409	.0011488
260	1149.2	2.7310	.0011683	1150.0	2.7280	.0011664	1150.8	2.7251	.0011646	1151.5	2.7222	.0011629
270	1192.7	2.8118	.0011835	1193.4	2.8087	.0011816	1194.1	2.8056	.0011796	1194.8	2.8025	.0011777
280	1236.5	2.8918	.0011997	1237.1	2.8885	.0011975	1237.7	2.8852	.0011954	1238.3	2.8820	.0011933
290	1280.7	2.9709	.0012167	1281.2	2.9675	.0012144	1281.7	2.9640	.0012121	1282.2	2.9606	.0012098
300	1325.3	3.0494	.0012348	1325.7	3.0457	.0012322	1326.0	3.0421	.0012297	1326.4	3.0385	.0012273

TABLE 3 WATER AND STEAM

	p(MPa) = 84.000			= 86.000			= 88.000			= 90.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1370.3	3.1272	.0012540	1370.5	3.1233	.0012512	1370.8	3.1194	.0012484	1371.0	3.1156	.0012457
320	1415.7	3.2044	.0012745	1415.8	3.2002	.0012714	1415.8	3.1961	.0012684	1415.9	3.1920	.0012654
330	1461.5	3.2810	.0012964	1461.4	3.2765	.0012930	1461.3	3.2720	.0012897	1461.2	3.2677	.0012864
340	1507.8	3.3571	.0013201	1507.4	3.3522	.0013163	1507.1	3.3474	.0013126	1506.8	3.3426	.0013090
350	1554.5	3.4326	.0013459	1553.8	3.4273	.0013417	1553.2	3.4220	.0013375	1552.7	3.4169	.0013335
360	1608.0	3.5182	.0013734	1607.3	3.5127	.0013686	1606.6	3.5073	.0013640	1605.9	3.5020	.0013595
370	1653.2	3.5891	.0014020	1652.2	3.5832	.0013967	1651.4	3.5775	.0013915	1650.5	3.5719	.0013865
380	1704.2	3.6677	.0014327	1702.9	3.6614	.0014267	1701.8	3.6552	.0014209	1700.7	3.6492	.0014152
390	1756.8	3.7476	.0014657	1755.2	3.7409	.0014589	1753.8	3.7343	.0014523	1752.4	3.7279	.0014459
400	1810.0	3.8272	.0015013	1808.0	3.8199	.0014935	1806.2	3.8128	.0014860	1804.6	3.8059	.0014788
410	1863.6	3.9063	.0015400	1861.3	3.8984	.0015311	1859.1	3.8907	.0015225	1857.0	3.8832	.0015143
420	1917.7	3.9850	.0015823	1914.8	3.9762	.0015720	1912.1	3.9678	.0015621	1909.6	3.9597	.0015527
430	1972.3	4.0631	.0016288	1968.8	4.0535	.0016168	1965.5	4.0443	.0016055	1962.5	4.0354	.0015947
440	2027.4	4.1409	.0016800	2023.2	4.1304	.0016661	2019.3	4.1203	.0016530	2015.7	4.1105	.0016405
450	2083.2	4.2186	.0017364	2078.3	4.2070	.0017202	2073.7	4.1959	.0017050	2069.3	4.1852	.0016906
460	2139.8	4.2963	.0017984	2134.1	4.2836	.0017796	2128.7	4.2715	.0017619	2123.7	4.2599	.0017452
470	2197.4	4.3743	.0018665	2190.8	4.3605	.0018444	2184.6	4.3472	.0018238	2178.8	4.3346	.0018046
480	2256.0	4.4527	.0019408	2248.5	4.4376	.0019151	2241.5	4.4232	.0018912	2234.9	4.4095	.0018689
490	2315.7	4.5314	.0020217	2307.2	4.5150	.0019917	2299.3	4.4995	.0019640	2291.9	4.4848	.0019384
500	2376.3	4.6103	.0021090	2366.8	4.5927	.0020744	2358.1	4.5760	.0020424	2349.9	4.5602	.0020129
510	2437.6	4.6891	.0022027	2427.2	4.6703	.0021630	2417.5	4.6524	.0021264	2408.5	4.6355	.0020927
520	2499.1	4.7671	.0023023	2487.9	4.7472	.0022572	2477.4	4.7284	.0022157	2467.6	4.7105	.0021775
530	2560.3	4.8439	.0024069	2548.4	4.8231	.0023565	2537.2	4.8033	.0023099	2526.6	4.7845	.0022670
540	2620.8	4.9187	.0025156	2608.2	4.8971	.0024599	2596.4	4.8766	.0024083	2585.3	4.8570	.0023606
550	2679.9	4.9910	.0026273	2667.0	4.9689	.0025665	2654.7	4.9478	.0025101	2643.0	4.9276	.0024578
560	2737.5	5.0605	.0027410	2724.2	5.0381	.0026754	2711.6	5.0166	.0026144	2699.6	4.9960	.0025576
570	2792.3	5.1259	.0028529	2779.2	5.1037	.0027835	2766.8	5.0825	.0027191	2754.9	5.0619	.0026594
580	2846.4	5.1897	.0029671	2833.0	5.1671	.0028931	2820.2	5.1454	.0028241	2808.0	5.1246	.0027598
590	2899.7	5.2518	.0030821	2886.3	5.2292	.0030040	2873.4	5.2074	.0029311	2861.0	5.1863	.0028629
600	2952.0	5.3121	.0031968	2938.7	5.2896	.0031149	2925.9	5.2679	.0030384	2913.5	5.2468	.0029668

TABLE 3 WATER AND STEAM

	p(MPa) = 84.000			= 86.000			= 88.000			= 90.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	3003.1	5.3703	.0033108	2989.9	5.3480	.0032251	2977.2	5.3264	.0031450	2965.0	5.3055	.0030700
620	3052.9	5.4264	.0034239	3039.9	5.4042	.0033345	3027.3	5.3827	.0032508	3015.2	5.3620	.0031724
630	3101.4	5.4804	.0035361	3088.5	5.4584	.0034431	3076.1	5.4371	.0033559	3064.1	5.4165	.0032741
640	3148.6	5.5323	.0036472	3135.9	5.5106	.0035508	3123.6	5.4894	.0034603	3111.8	5.4689	.0033753
650	3194.5	5.5823	.0037568	3182.1	5.5608	.0036575	3170.0	5.5399	.0035640	3158.2	5.5195	.0034759
660	3239.1	5.6304	.0038649	3227.0	5.6092	.0037629	3215.1	5.5885	.0036666	3203.6	5.5684	.0035758
670	3282.6	5.6767	.0039711	3270.7	5.6559	.0038667	3259.2	5.6355	.0037681	3247.8	5.6156	.0036747
680	3324.9	5.7213	.0040756	3313.4	5.7008	.0039690	3302.1	5.6808	.0038681	3291.0	5.6611	.0037725
690	3366.2	5.7645	.0041783	3355.0	5.7443	.0040696	3344.1	5.7246	.0039667	3333.2	5.7052	.0038691
700	3406.6	5.8062	.0042791	3395.8	5.7864	.0041685	3385.1	5.7669	.0040637	3374.6	5.7479	.0039642
710	3446.2	5.8466	.0043783	3435.7	5.8272	.0042658	3425.3	5.8081	.0041592	3415.1	5.7893	.0040580
720	3485.0	5.8859	.0044757	3474.8	5.8668	.0043615	3464.8	5.8480	.0042532	3454.8	5.8295	.0041503
730	3523.2	5.9242	.0045716	3513.3	5.9053	.0044557	3503.5	5.8868	.0043457	3493.9	5.8686	.0042411
740	3560.7	5.9614	.0046659	3551.1	5.9429	.0045483	3541.7	5.9246	.0044367	3532.3	5.9067	.0043306
750	3597.7	5.9978	.0047588	3588.4	5.9795	.0046396	3579.2	5.9616	.0045263	3570.1	5.9439	.0044187
760	3634.3	6.0333	.0048504	3625.2	6.0153	.0047294	3616.3	5.9976	.0046146	3607.5	5.9802	.0045054
770	3670.3	6.0681	.0049407	3661.6	6.0503	.0048181	3652.9	6.0329	.0047016	3644.3	6.0157	.0045910
780	3706.0	6.1021	.0050298	3697.5	6.0846	.0049055	3689.1	6.0674	.0047875	3680.7	6.0505	.0046753
790	3741.4	6.1355	.0051177	3733.1	6.1182	.0049918	3724.9	6.1012	.0048722	3716.7	6.0845	.0047585
800	3776.3	6.1683	.0052045	3768.3	6.1512	.0050770	3760.3	6.1344	.0049559	3752.4	6.1179	.0048407

TABLE 3 WATER AND STEAM

	p(MPa) = 92.500			= 95.000			= 97.500			=100.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
0	89.0	-.0056	.0009593	91.3	-.0059	.0009583	93.6	-.0063	.0009574	95.9	-.0067	.0009565
10	127.9	.1342	.0009614	130.1	.1336	.0009605	132.3	.1329	.0009595	134.5	.1323	.0009586
20	167.5	.2716	.0009643	169.7	.2708	.0009634	171.8	.2700	.0009625	174.0	.2692	.0009616
30	207.4	.4055	.0009678	209.5	.4046	.0009669	211.7	.4037	.0009660	213.8	.4027	.0009651
40	247.5	.5356	.0009716	249.6	.5346	.0009708	251.7	.5335	.0009699	253.8	.5325	.0009690
50	287.6	.6618	.0009759	289.7	.6607	.0009750	291.8	.6596	.0009741	293.9	.6585	.0009733
60	327.8	.7844	.0009805	329.9	.7832	.0009796	331.9	.7820	.0009787	334.0	.7808	.0009779
70	368.1	.9035	.0009855	370.1	.9022	.0009846	372.2	.9009	.0009837	374.2	.8996	.0009828
80	408.5	1.0193	.0009909	410.4	1.0179	.0009900	412.4	1.0165	.0009891	414.4	1.0152	.0009882
90	448.9	1.1321	.0009966	450.8	1.1306	.0009957	452.8	1.1292	.0009948	454.7	1.1277	.0009939
100	489.3	1.2420	.0010028	491.2	1.2405	.0010018	493.2	1.2389	.0010009	495.1	1.2373	.0009999
110	529.9	1.3492	.0010093	531.7	1.3476	.0010083	533.6	1.3459	.0010073	535.5	1.3442	.0010064
120	570.5	1.4539	.0010162	572.3	1.4521	.0010152	574.2	1.4503	.0010142	576.0	1.4486	.0010132
130	611.2	1.5561	.0010235	613.0	1.5542	.0010225	614.8	1.5524	.0010214	616.6	1.5505	.0010204
140	651.9	1.6560	.0010312	653.7	1.6541	.0010301	655.5	1.6521	.0010290	657.2	1.6502	.0010279
150	692.8	1.7538	.0010393	694.6	1.7517	.0010382	696.3	1.7497	.0010370	698.0	1.7476	.0010359
160	733.8	1.8496	.0010479	735.5	1.8474	.0010467	737.2	1.8452	.0010455	738.9	1.8431	.0010443
170	775.0	1.9434	.0010568	776.6	1.9411	.0010556	778.2	1.9389	.0010543	779.8	1.9366	.0010531
180	816.2	2.0355	.0010662	817.8	2.0331	.0010649	819.4	2.0307	.0010636	820.9	2.0283	.0010623
190	857.6	2.1258	.0010761	859.1	2.1233	.0010747	860.6	2.1208	.0010733	862.2	2.1183	.0010720
200	899.1	2.2145	.0010865	900.6	2.2119	.0010850	902.1	2.2093	.0010836	903.5	2.2067	.0010821
210	940.8	2.3018	.0010974	942.2	2.2990	.0010958	943.6	2.2962	.0010943	945.1	2.2935	.0010928
220	982.7	2.3876	.0011088	984.1	2.3847	.0011072	985.4	2.3818	.0011055	986.7	2.3789	.0011039
230	1024.8	2.4721	.0011208	1026.1	2.4690	.0011191	1027.3	2.4660	.0011173	1028.6	2.4630	.0011156
240	1067.1	2.5554	.0011335	1068.3	2.5522	.0011316	1069.5	2.5490	.0011297	1070.7	2.5458	.0011279
250	1109.7	2.6375	.0011467	1110.8	2.6341	.0011447	1111.9	2.6308	.0011427	1113.0	2.6275	.0011408
260	1152.5	2.7186	.0011607	1153.5	2.7151	.0011585	1154.6	2.7115	.0011564	1155.6	2.7081	.0011543
270	1195.7	2.7987	.0011753	1196.6	2.7950	.0011730	1197.5	2.7913	.0011707	1198.4	2.7877	.0011684
280	1239.1	2.8780	.0011908	1239.9	2.8741	.0011882	1240.7	2.8702	.0011858	1241.5	2.8663	.0011833
290	1282.8	2.9564	.0012070	1283.5	2.9522	.0012043	1284.2	2.9481	.0012016	1284.9	2.9441	.0011990
300	1326.9	3.0340	.0012242	1327.5	3.0296	.0012213	1328.1	3.0253	.0012184	1328.7	3.0210	.0012155

TABLE 3 WATER AND STEAM

	p(MPa) = 92.500			= 95.000			= 97.500			=100.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
310	1371.4	3.1108	.0012424	1371.8	3.1062	.0012392	1372.2	3.1016	.0012360	1372.6	3.0971	.0012329
320	1416.1	3.1869	.0012618	1416.3	3.1820	.0012582	1416.6	3.1771	.0012548	1416.9	3.1723	.0012514
330	1461.2	3.2623	.0012824	1461.2	3.2570	.0012785	1461.2	3.2518	.0012747	1461.3	3.2467	.0012710
340	1506.5	3.3368	.0013046	1506.3	3.3311	.0013003	1506.1	3.3255	.0012961	1505.9	3.3200	.0012921
350	1552.1	3.4105	.0013286	1551.5	3.4043	.0013239	1551.0	3.3982	.0013193	1550.6	3.3922	.0013148
360	1605.2	3.4955	.0013541	1604.5	3.4891	.0013488	1603.9	3.4828	.0013437	1603.4	3.4767	.0013388
370	1649.6	3.5650	.0013804	1648.7	3.5583	.0013746	1647.9	3.5518	.0013690	1647.2	3.5454	.0013635
380	1699.4	3.6419	.0014084	1698.3	3.6348	.0014019	1697.2	3.6278	.0013956	1696.3	3.6211	.0013895
390	1750.8	3.7200	.0014383	1749.4	3.7124	.0014309	1748.1	3.7051	.0014239	1746.8	3.6979	.0014171
400	1802.6	3.7975	.0014702	1800.8	3.7894	.0014619	1799.1	3.7815	.0014540	1797.6	3.7738	.0014464
410	1854.6	3.8741	.0015044	1852.3	3.8654	.0014951	1850.3	3.8569	.0014861	1848.4	3.8487	.0014776
420	1906.7	3.9498	.0015415	1903.9	3.9403	.0015309	1901.4	3.9312	.0015208	1899.0	3.9223	.0015111
430	1958.9	4.0247	.0015818	1955.6	4.0143	.0015697	1952.5	4.0044	.0015582	1949.7	3.9948	.0015473
440	2011.4	4.0988	.0016258	2007.4	4.0875	.0016120	2003.7	4.0768	.0015989	2000.3	4.0664	.0015865
450	2064.3	4.1725	.0016737	2059.6	4.1602	.0016579	2055.3	4.1485	.0016430	2051.2	4.1373	.0016290
460	2117.8	4.2460	.0017258	2112.4	4.2327	.0017077	2107.4	4.2200	.0016907	2102.7	4.2079	.0016748
470	2172.1	4.3195	.0017823	2165.9	4.3052	.0017615	2160.1	4.2916	.0017422	2154.8	4.2785	.0017242
480	2227.3	4.3933	.0018432	2220.3	4.3779	.0018195	2213.8	4.3632	.0017975	2207.7	4.3493	.0017770
490	2283.4	4.4673	.0019088	2275.5	4.4508	.0018816	2268.3	4.4351	.0018566	2261.5	4.4202	.0018334
500	2340.4	4.5415	.0019790	2331.7	4.5238	.0019481	2323.6	4.5072	.0019196	2316.1	4.4913	.0018934
510	2398.1	4.6156	.0020540	2388.5	4.5968	.0020188	2379.6	4.5791	.0019865	2371.4	4.5624	.0019568
520	2456.2	4.6893	.0021336	2445.7	4.6695	.0020937	2436.1	4.6508	.0020573	2427.2	4.6331	.0020239
530	2514.4	4.7623	.0022177	2503.1	4.7413	.0021728	2492.7	4.7217	.0021319	2483.0	4.7031	.0020944
540	2572.2	4.8338	.0023058	2560.2	4.8120	.0022559	2549.0	4.7914	.0022102	2538.6	4.7719	.0021684
550	2629.4	4.9037	.0023975	2616.6	4.8810	.0023424	2604.8	4.8596	.0022919	2593.8	4.8393	.0022456
560	2685.4	4.9714	.0024920	2672.2	4.9481	.0024319	2659.8	4.9260	.0023766	2648.2	4.9050	.0023259
570	2740.3	5.0369	.0025887	2726.7	5.0131	.0025237	2713.8	4.9905	.0024639	2701.8	4.9689	.0024086
580	2793.6	5.0997	.0026854	2780.1	5.0761	.0026173	2766.9	5.0531	.0025530	2754.5	5.0311	.0024935
590	2846.1	5.1609	.0027837	2832.0	5.1366	.0027105	2818.6	5.1134	.0026429	2806.2	5.0914	.0025803
600	2898.6	5.2214	.0028835	2884.3	5.1969	.0028063	2870.6	5.1732	.0027347	2857.5	5.1505	.0026681

TABLE 3 WATER AND STEAM

	p(MPa) = 92.500			= 95.000			= 97.500			=100.000		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
610	2950.3	5.2802	.0029829	2936.2	5.2559	.0029023	2922.6	5.2324	.0028275	2909.5	5.2097	.0027577
620	3000.7	5.3370	.0030814	2986.8	5.3130	.0029973	2973.5	5.2898	.0029192	2960.7	5.2674	.0028467
630	3049.7	5.3916	.0031790	3036.1	5.3678	.0030911	3023.0	5.3449	.0030097	3010.5	5.3228	.0029341
640	3097.5	5.4442	.0032761	3083.9	5.4205	.0031843	3070.9	5.3977	.0030992	3058.6	5.3758	.0030232
650	3144.1	5.4949	.0033728	3130.5	5.4712	.0032772	3117.6	5.4485	.0031884	3105.3	5.4267	.0031058
660	3189.6	5.5439	.0034692	3176.1	5.5203	.0033700	3163.1	5.4976	.0032776	3150.8	5.4757	.0031915
670	3234.0	5.5913	.0035650	3220.6	5.5678	.0034626	3207.7	5.5451	.0033669	3195.4	5.5232	.0032775
680	3277.5	5.6372	.0036600	3264.3	5.6139	.0035547	3251.5	5.5912	.0034561	3239.1	5.5693	.0033637
690	3320.0	5.6815	.0037540	3307.0	5.6585	.0036462	3294.4	5.6360	.0035449	3282.1	5.6142	.0034498
700	3361.6	5.7245	.0038469	3348.9	5.7018	.0037367	3336.5	5.6795	.0036331	3324.4	5.6579	.0035356
710	3402.4	5.7663	.0039385	3390.1	5.7438	.0038261	3377.9	5.7218	.0037204	3366.0	5.7004	.0036208
720	3442.5	5.8069	.0040287	3430.5	5.7847	.0039144	3418.6	5.7630	.0038068	3406.9	5.7418	.0037052
730	3481.9	5.8463	.0041176	3470.2	5.8245	.0040014	3458.6	5.8031	.0038920	3447.2	5.7822	.0037887
740	3520.7	5.8848	.0042052	3509.3	5.8633	.0040872	3498.0	5.8422	.0039760	3486.9	5.8216	.0038711
750	3558.9	5.9223	.0042914	3547.8	5.9011	.0041717	3536.9	5.8804	.0040588	3526.0	5.8600	.0039523
760	3596.5	5.9589	.0043764	3585.8	5.9381	.0042549	3575.1	5.9176	.0041404	3564.6	5.8976	.0040323
770	3633.7	5.9947	.0044601	3623.3	5.9742	.0043369	3612.9	5.9540	.0042208	3602.7	5.9342	.0041112
780	3670.4	6.0297	.0045426	3660.3	6.0095	.0044178	3650.2	5.9896	.0043000	3640.3	5.9701	.0041889
790	3706.7	6.0641	.0046241	3696.9	6.0441	.0044975	3687.1	6.0245	.0043782	3677.5	6.0053	.0042655
800	3742.7	6.0977	.0047044	3733.1	6.0779	.0045762	3723.6	6.0586	.0044552	3714.3	6.0397	.0043411

TABLE 3A WATER AND SUPER HEATED STEAM IN 1°C STEPS OF TEMPERATURE NEAR CRITICAL POINT

	p(MPa) = 20.50			= 21.00			= 21.50			= 22.00		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
356	1697.5	3.8101	.0017363	1693.6	3.8027	.0017247	1690.1	3.7957	.0017139	1686.8	3.7890	.0017039
357	1706.9	3.8251	.0017522	1702.7	3.8171	.0017396	1698.9	3.8097	.0017279	1695.3	3.8026	.0017172
358	1716.5	3.8404	.0017693	1712.0	3.8318	.0017555	1707.9	3.8239	.0017428	1704.0	3.8165	.0017312
359	1726.5	3.8561	.0017877	1721.5	3.8469	.0017725	1717.0	3.8384	.0017587	1712.9	3.8305	.0017460
360	1736.8	3.8724	.0018077	1731.4	3.8625	.0017908	1726.5	3.8533	.0017756	1722.0	3.8449	.0017619
361	1747.6	3.8895	.0018297	1741.6	3.8786	.0018107	1736.2	3.8687	.0017939	1731.3	3.8596	.0017787
362	1759.0	3.9074	.0018539	1752.3	3.8954	.0018324	1746.3	3.8846	.0018136	1741.0	3.8748	.0017968
363	1771.1	3.9266	.0018811	1763.5	3.9131	.0018563	1756.9	3.9012	.0018350	1751.0	3.8905	.0018164
364	1784.3	3.9472	.0019122	1775.5	3.9319	.0018830	1768.0	3.9186	.0018586	1761.4	3.9069	.0018376
365	1798.8	3.9699	.0019485	1788.3	3.9521	.0019132	1779.8	3.9371	.0018847	1772.4	3.9242	.0018608
366	1815.2	3.9957	.0019925	1802.5	3.9742	.0019482	1792.4	3.9570	.0019142	1784.1	3.9424	.0018865
367	1834.9	4.0265	.0020492	1818.4	3.9991	.0019900	1806.3	3.9786	.0019481	1796.6	3.9619	.0019153
368	2397.7	4.9045	.0055623	1837.0	4.0281	.0020424	1821.7	4.0027	.0019880	1810.1	3.9831	.0019481
369	2435.6	4.9635	.0058981	1860.4	4.0647	.0021142	1839.5	4.0304	.0020370	1825.2	4.0066	.0019864
370	2464.7	5.0088	.0061619	2362.0	4.8447	.0051419	1861.2	4.0642	.0021013	1842.3	4.0333	.0020326
371	2489.0	5.0466	.0063858	2409.4	4.9184	.0055422	1890.7	4.1100	.0021980	1862.7	4.0649	.0020914
372	2510.2	5.0795	.0065836	2443.0	4.9704	.0058332	2321.2	4.7776	.0047121	1888.8	4.1054	.0021736
373	2529.1	5.1088	.0067626	2470.0	5.0122	.0060723	2382.6	4.8727	.0052029	1929.1	4.1679	.0023169
374	2546.4	5.1355	.0069274	2493.1	5.0480	.0062802	2421.3	4.9325	.0055243	2276.2	4.7044	.0042852
375	2562.4	5.1601	.0070807	2513.5	5.0795	.0064660	2451.3	4.9788	.0057796	2355.9	4.8276	.0048860
376	2577.2	5.1830	.0072246	2531.9	5.1079	.0066356	2476.4	5.0175	.0059970	2400.2	4.8958	.0052377
377	2591.1	5.2045	.0073605	2548.8	5.1339	.0067924	2498.3	5.0512	.0061893	2433.2	4.9466	.0055079
378	2604.3	5.2247	.0074898	2564.4	5.1579	.0069389	2517.8	5.0813	.0063634	2460.3	4.9883	.0057342
379	2616.8	5.2439	.0076130	2579.1	5.1804	.0070769	2535.7	5.1086	.0065235	2483.7	5.0241	.0059324
380	2628.7	5.2622	.0077331	2592.8	5.2015	.0072076	2552.1	5.1338	.0066725	2504.4	5.0559	.0061105
381	2639.7	5.2791	.0078434	2605.9	5.2214	.0073322	2567.4	5.1573	.0068123	2523.1	5.0846	.0062735
382	2650.4	5.2954	.0079504	2618.3	5.2404	.0074512	2581.8	5.1792	.0069444	2540.4	5.1109	.0064245
383	2660.8	5.3112	.0080543	2630.1	5.2585	.0075673	2595.4	5.1999	.0070700	2556.4	5.1353	.0065659
384	2670.8	5.3265	.0081555	2641.1	5.2753	.0076741	2608.3	5.2196	.0071898	2571.3	5.1580	.0066991
385	2680.6	5.3413	.0082540	2651.8	5.2915	.0077778	2620.6	5.2382	.0073046	2585.4	5.1795	.0068254
386	2690.1	5.3557	.0083501	2662.1	5.3072	.0078787	2632.3	5.2561	.0074158	2598.8	5.1997	.0069457
387	2699.3	5.3697	.0084439	2672.1	5.3223	.0079769	2643.2	5.2727	.0075191	2611.5	5.2190	.0070608
388	2708.3	5.3833	.0085355	2681.8	5.3371	.0080726	2653.8	5.2887	.0076196	2623.6	5.2374	.0071713
389	2717.0	5.3965	.0086250	2691.3	5.3514	.0081660	2664.0	5.3042	.0077173	2635.1	5.2548	.0072773
390	2725.6	5.4094	.0087126	2700.5	5.3652	.0082572	2674.0	5.3192	.0078125	2645.9	5.2711	.0073771

TABLE 3A WATER AND SUPER HEATED STEAM IN 1°C STEPS OF TEMPERATURE NEAR CRITICAL POINT

p(MPa)	22.50			= 23.00			= 23.50			= 24.00		
t °C	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg	h kJ/kg	s kJ/kg K	v m³/kg
356	1683.6	3.7827	.0016945	1680.7	3.7767	.0016856	1677.9	3.7710	.0016773	1675.3	3.7654	.0016693
357	1692.0	3.7960	.0017071	1688.9	3.7897	.0016977	1685.9	3.7837	.0016888	1683.1	3.7779	.0016804
358	1700.5	3.8094	.0017204	1697.1	3.8028	.0017103	1694.0	3.7965	.0017008	1691.1	3.7905	.0016919
359	1709.1	3.8231	.0017344	1705.5	3.8161	.0017236	1702.2	3.8094	.0017134	1699.1	3.8031	.0017039
360	1717.9	3.8370	.0017492	1714.1	3.8296	.0017376	1710.5	3.8226	.0017267	1707.2	3.8159	.0017166
361	1726.9	3.8512	.0017650	1722.8	3.8433	.0017524	1719.0	3.8359	.0017407	1715.4	3.8289	.0017298
362	1736.1	3.8658	.0017818	1731.7	3.8574	.0017681	1727.6	3.8495	.0017555	1723.8	3.8422	.0017438
363	1745.7	3.8808	.0017998	1740.9	3.8718	.0017848	1736.5	3.8635	.0017711	1732.4	3.8557	.0017585
364	1755.6	3.8964	.0018191	1750.4	3.8867	.0018027	1745.6	3.8778	.0017877	1741.2	3.8695	.0017741
365	1766.0	3.9126	.0018401	1760.2	3.9022	.0018219	1755.0	3.8926	.0018055	1750.3	3.8838	.0017906
366	1776.9	3.9297	.0018630	1770.5	3.9183	.0018426	1764.8	3.9080	.0018245	1759.7	3.8985	.0018083
367	1788.4	3.9477	.0018883	1781.3	3.9352	.0018652	1775.1	3.9240	.0018451	1769.4	3.9137	.0018271
368	1800.7	3.9670	.0019164	1792.7	3.9530	.0018900	1785.8	3.9407	.0018674	1779.6	3.9296	.0018475
369	1814.1	3.9878	.0019483	1805.0	3.9720	.0019176	1797.1	3.9584	.0018918	1790.3	3.9463	.0018695
370	1828.8	4.0107	.0019852	1818.1	3.9926	.0019486	1809.2	3.9772	.0019188	1801.6	3.9638	.0018935
371	1845.4	4.0365	.0020291	1832.6	4.0150	.0019842	1822.3	3.9975	.0019491	1813.6	3.9825	.0019200
372	1864.8	4.0665	.0020836	1848.7	4.0400	.0020261	1836.5	4.0195	.0019835	1826.5	4.0025	.0019496
373	1888.6	4.1034	.0021561	1867.2	4.0687	.0020771	1852.2	4.0439	.0020236	1840.5	4.0242	.0019830
374	1921.2	4.1538	.0022662	1889.3	4.1029	.0021425	1870.0	4.0715	.0020717	1855.9	4.0480	.0020215
375	1962.4	4.2483	.0025085	1917.6	4.1465	.0022342	1890.8	4.1034	.0021315	1873.1	4.0745	.0020670
376	2238.1	4.6426	.0039426	1959.3	4.2107	.0023871	1916.0	4.1424	.0022109	1892.6	4.1047	.0021223
377	2331.0	4.7856	.0046027	2049.3	4.3493	.0027855	1949.6	4.1941	.0023280	1915.8	4.1403	.0021930
378	2380.3	4.8612	.0049771	2219.9	4.6115	.0037545	2002.1	4.2747	.0025367	1944.7	4.1847	.0022897
379	2416.1	4.9162	.0052590	2310.2	4.7501	.0043661	2098.4	4.4225	.0029944	1984.2	4.2453	.0024369
380	2445.1	4.9606	.0054924	2362.5	4.8302	.0047469	2215.1	4.6014	.0036619	2044.0	4.3370	.0026917
381	2469.8	4.9985	.0056952	2400.5	4.8884	.0050347	2294.9	4.7234	.0041820	2128.9	4.4669	.0031124
382	2491.7	5.0318	.0058765	2431.1	4.9351	.0052722	2347.6	4.8039	.0045502	2216.6	4.6008	.0036112
383	2511.3	5.0618	.0060416	2457.0	4.9747	.0054778	2386.8	4.8637	.0048363	2285.4	4.7057	.0040457
384	2529.3	5.0891	.0061942	2479.8	5.0093	.0056610	2418.5	4.9119	.0050740	2336.0	4.7828	.0043873
385	2545.9	5.1144	.0063366	2500.2	5.0404	.0058275	2445.4	4.9528	.0052800	2375.3	4.8426	.0046641
386	2561.4	5.1380	.0064706	2518.9	5.0687	.0059809	2468.9	4.9886	.0054637	2407.6	4.8916	.0048980
387	2576.0	5.1601	.0065974	2536.1	5.0948	.0061239	2490.0	5.0206	.0056305	2435.1	4.9333	.0051021
388	2589.8	5.1809	.0067180	2552.1	5.1190	.0062582	2509.3	5.0497	.0057840	2459.2	4.9698	.0052844
389	2602.9	5.2007	.0068333	2567.1	5.1417	.0063851	2526.9	5.0764	.0059268	2		

TABLE 4 SPECIFIC HEAT CAPACITY AT CONSTANT PRESSURE, C_p IN kJ/(kg K)

t(°C) \ p(MPa) -->	.1	.5	1.	1.5	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0
0	4.217	4.215	4.212	4.209	4.207	4.201	4.196	4.191	4.186	4.181	4.175	4.170	4.165	4.160	4.155	4.151
10	4.192	4.191	4.189	4.187	4.185	4.181	4.177	4.173	4.169	4.165	4.162	4.158	4.154	4.150	4.147	4.143
20	4.182	4.181	4.179	4.177	4.176	4.173	4.169	4.166	4.163	4.160	4.157	4.154	4.151	4.148	4.145	4.142
30	4.178	4.177	4.176	4.175	4.173	4.171	4.165	4.165	4.162	4.160	4.157	4.155	4.152	4.149	4.147	4.144
40	4.179	4.178	4.176	4.175	4.174	4.171	4.169	4.167	4.164	4.162	4.159	4.157	4.155	4.152	4.150	4.148
50	4.181	4.180	4.179	4.178	4.177	4.174	4.172	4.170	4.167	4.165	4.163	4.161	4.158	4.156	4.154	4.152
60	4.185	4.184	4.183	4.182	4.180	4.178	4.176	4.174	4.172	4.169	4.167	4.165	4.163	4.161	4.159	4.157
70	4.190	4.189	4.188	4.187	4.186	4.183	4.181	4.179	4.177	4.175	4.173	4.171	4.169	4.167	4.164	4.162
80	4.196	4.196	4.194	4.193	4.192	4.190	4.188	4.186	4.184	4.182	4.180	4.177	4.175	4.173	4.171	4.169
90	4.205	4.204	4.203	4.202	4.201	4.199	4.196	4.194	4.192	4.190	4.188	4.186	4.184	4.182	4.180	4.178
100	2.026	4.215	4.214	4.212	4.211	4.209	4.207	4.205	4.203	4.200	4.198	4.196	4.194	4.192	4.190	4.188
110	2.015	4.228	4.227	4.226	4.224	4.222	4.220	4.217	4.215	4.213	4.211	4.208	4.206	4.204	4.202	4.200
120	2.005	4.244	4.243	4.241	4.240	4.238	4.235	4.233	4.230	4.228	4.226	4.223	4.221	4.218	4.216	4.214
130	1.997	4.263	4.261	4.260	4.259	4.256	4.253	4.251	4.248	4.246	4.243	4.241	4.238	4.236	4.233	4.231
140	1.991	4.285	4.283	4.282	4.280	4.277	4.275	4.272	4.269	4.266	4.263	4.261	4.258	4.255	4.253	4.250
150	1.986	4.310	4.308	4.307	4.305	4.302	4.299	4.296	4.293	4.290	4.287	4.284	4.281	4.278	4.275	4.272
160	1.983	2.291	4.337	4.335	4.334	4.330	4.327	4.323	4.320	4.317	4.313	4.310	4.307	4.303	4.300	4.297
170	1.981	2.250	4.370	4.368	4.366	4.362	4.358	4.355	4.351	4.347	4.343	4.340	4.336	4.333	4.329	4.325
180	1.979	2.216	2.593	4.405	4.403	4.399	4.394	4.390	4.386	4.382	4.378	4.373	4.369	4.365	4.361	4.357
190	1.979	2.186	2.614	4.448	4.445	4.440	4.436	4.431	4.426	4.421	4.416	4.412	4.407	4.403	4.398	4.394
200	1.979	2.161	2.446	2.800	4.494	4.488	4.483	4.477	4.471	4.466	4.461	4.455	4.450	4.445	4.440	4.435
210	1.980	2.141	2.389	2.694	4.550	4.543	4.537	4.530	4.524	4.518	4.511	4.505	4.499	4.493	4.487	4.482
220	1.982	2.123	2.340	2.603	2.918	4.609	4.602	4.592	4.585	4.577	4.570	4.563	4.556	4.549	4.542	4.535
230	1.984	2.109	2.298	2.526	2.797	4.683	4.674	4.665	4.656	4.647	4.638	4.630	4.622	4.613	4.605	4.598
240	1.986	2.097	2.263	2.461	2.694	3.282	4.761	4.750	4.739	4.729	4.718	4.708	4.698	4.689	4.679	4.670
250	1.989	2.088	2.233	2.406	2.608	3.108	4.866	4.853	4.839	4.826	4.814	4.801	4.789	4.777	4.766	4.755
260	1.993	2.080	2.208	2.359	2.534	2.983	3.528	4.977	4.961	4.944	4.928	4.913	4.898	4.883	4.869	4.855
270	1.997	2.075	2.187	2.319	2.472	2.841	3.315	3.952	5.111	5.090	5.069	5.050	5.031	5.012	4.994	4.977
280	2.001	2.071	2.170	2.286	2.419	2.738	3.139	3.659	4.375	5.274	5.247	5.221	5.196	5.172	5.149	5.126
290	2.006	2.068	2.156	2.258	2.374	2.651	2.994	3.424	3.990	4.782	5.478	5.442	5.408	5.375	5.344	5.315
300	2.010	2.066	2.145	2.235	2.337	2.578	2.873	3.234	3.691	4.298	5.155	5.741	5.692	5.645	5.601	5.560
310	2.015	2.066	2.136	2.218	2.305	2.516	2.772	3.078	3.454	3.932	4.570	5.466	6.094	6.023	5.956	5.894
320	2.020	2.066	2.129	2.200	2.279	2.464	2.666	2.949	3.264	3.649	4.141	4.793	5.693	7.083	6.486	6.383
330	2.026	2.067	2.124	2.187	2.257	2.420	2.614	2.842	3.108	3.426	3.817	4.312	4.959	5.832	7.112	7.193
340	2.031	2.069	2.120	2.177	2.239	2.383	2.553	2.751	2.960	3.247	3.565	3.953	4.441	5.071	5.903	7.061
350	2.037	2.071	2.118	2.169	2.224	2.352	2.502	2.675	2.874	3.101	3.365	3.677	4.058	4.532	5.136	5.920

TABLE 4 SPECIFIC HEAT CAPACITY AT CONSTANT PRESSURE, C, IN kJ/(kg K)

	p(MPa) -->															
t(°C)	.1	.5	1.0	1.5	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0
360	2.243	2.074	2.116	2.162	2.213	2.326	2.459	2.611	2.764	2.980	3.203	3.461	3.765	4.132	4.585	5.155
370	2.249	2.078	2.116	2.158	2.203	2.305	2.423	2.557	2.709	2.879	3.071	3.287	3.536	3.828	4.177	4.603
380	2.255	2.081	2.117	2.155	2.196	2.287	2.392	2.512	2.646	2.795	2.961	3.146	3.354	3.592	3.869	4.195
390	2.261	2.086	2.118	2.153	2.190	2.273	2.367	2.473	2.592	2.724	2.869	3.029	3.207	3.406	3.630	3.889
400	2.267	2.091	2.120	2.152	2.186	2.261	2.346	2.441	2.547	2.663	2.792	2.932	3.086	3.255	3.443	3.653
410	2.273	2.095	2.123	2.152	2.184	2.252	2.328	2.414	2.508	2.612	2.726	2.850	2.984	3.131	3.291	3.467
420	2.280	2.100	2.126	2.153	2.182	2.244	2.314	2.391	2.476	2.569	2.671	2.781	2.899	3.028	3.166	3.317
430	2.286	2.105	2.129	2.155	2.182	2.239	2.302	2.372	2.449	2.532	2.623	2.722	2.827	2.941	3.063	3.194
440	2.293	2.110	2.133	2.157	2.182	2.235	2.293	2.356	2.426	2.501	2.583	2.671	2.766	2.867	2.975	3.090
450	2.299	2.116	2.136	2.160	2.183	2.232	2.285	2.344	2.407	2.475	2.549	2.629	2.714	2.804	2.901	3.003
460	2.106	2.122	2.142	2.163	2.185	2.231	2.280	2.333	2.391	2.453	2.520	2.592	2.669	2.750	2.837	2.929
470	2.112	2.128	2.147	2.167	2.187	2.230	2.276	2.325	2.378	2.435	2.496	2.561	2.631	2.704	2.782	2.865
480	2.119	2.133	2.152	2.171	2.190	2.230	2.273	2.319	2.367	2.420	2.475	2.535	2.598	2.665	2.736	2.810
490	2.126	2.140	2.157	2.175	2.193	2.231	2.271	2.314	2.359	2.407	2.458	2.513	2.570	2.631	2.695	2.763
500	2.132	2.146	2.162	2.179	2.197	2.233	2.270	2.310	2.352	2.397	2.444	2.494	2.547	2.602	2.661	2.722
510	2.139	2.152	2.168	2.184	2.201	2.235	2.270	2.307	2.347	2.388	2.432	2.478	2.527	2.578	2.631	2.688
520	2.146	2.158	2.174	2.189	2.205	2.237	2.271	2.306	2.343	2.382	2.422	2.465	2.510	2.557	2.606	2.658
530	2.153	2.165	2.179	2.194	2.209	2.240	2.272	2.305	2.340	2.376	2.414	2.454	2.495	2.539	2.584	2.632
540	2.160	2.171	2.185	2.199	2.214	2.243	2.274	2.305	2.338	2.372	2.408	2.445	2.484	2.524	2.566	2.610
550	2.166	2.177	2.191	2.205	2.219	2.247	2.276	2.306	2.337	2.369	2.403	2.437	2.474	2.511	2.550	2.591
560	2.173	2.184	2.197	2.210	2.224	2.251	2.279	2.307	2.337	2.367	2.399	2.432	2.465	2.501	2.537	2.575
570	2.180	2.190	2.203	2.216	2.229	2.255	2.282	2.309	2.337	2.366	2.396	2.427	2.459	2.492	2.526	2.561
580	2.187	2.197	2.209	2.221	2.234	2.259	2.285	2.311	2.338	2.366	2.394	2.423	2.453	2.484	2.516	2.549
590	2.194	2.203	2.215	2.227	2.239	2.264	2.288	2.313	2.339	2.366	2.393	2.420	2.449	2.478	2.508	2.539
600	2.201	2.210	2.221	2.233	2.245	2.268	2.292	2.316	2.341	2.366	2.392	2.418	2.445	2.473	2.502	2.531
610	2.207	2.216	2.228	2.239	2.250	2.273	2.296	2.319	2.343	2.367	2.392	2.417	2.443	2.469	2.496	2.524
620	2.214	2.223	2.234	2.245	2.256	2.278	2.300	2.322	2.345	2.369	2.392	2.416	2.441	2.466	2.492	2.518
630	2.221	2.229	2.240	2.251	2.261	2.283	2.304	2.326	2.348	2.370	2.393	2.416	2.440	2.464	2.488	2.513
640	2.228	2.236	2.246	2.257	2.267	2.287	2.308	2.329	2.351	2.372	2.394	2.417	2.439	2.462	2.486	2.509
650	2.235	2.243	2.252	2.262	2.272	2.292	2.313	2.333	2.354	2.375	2.396	2.417	2.439	2.461	2.483	2.506
660	2.241	2.249	2.259	2.268	2.278	2.298	2.317	2.337	2.357	2.377	2.397	2.418	2.439	2.460	2.482	2.504
670	2.248	2.256	2.265	2.274	2.284	2.303	2.322	2.341	2.360	2.380	2.399	2.419	2.440	2.460	2.481	2.502
680	2.255	2.262	2.271	2.280	2.289	2.308	2.326	2.345	2.364	2.383	2.402	2.421	2.440	2.460	2.480	2.500
690	2.261	2.269	2.277	2.286	2.295	2.313	2.331	2.349	2.367	2.386	2.404	2.423	2.441	2.460	2.480	2.499
700	2.268	2.275	2.284	2.292	2.301	2.318	2.336	2.353	2.371	2.389	2.407	2.425	2.443	2.461	2.480	2.498

TABLE 4 SPECIFIC HEAT CAPACITY AT CONSTANT PRESSURE, C IN kJ/(kg K)

	p(MPa) -->															
t(°C)	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
0	4.146	4.141	4.136	4.131	4.127	4.122	4.117	4.113	4.108	4.104	4.099	4.095	4.090	4.086	4.082	4.077
10	4.140	4.136	4.132	4.129	4.125	4.122	4.119	4.115	4.112	4.109	4.105	4.102	4.099	4.096	4.093	4.089
20	4.139	4.137	4.134	4.131	4.128	4.125	4.123	4.120	4.117	4.115	4.112	4.109	4.107	4.104	4.102	4.099
30	4.142	4.139	4.137	4.135	4.132	4.130	4.127	4.125	4.123	4.120	4.118	4.116	4.114	4.111	4.109	4.107
40	4.146	4.143	4.141	4.139	4.137	4.134	4.132	4.130	4.128	4.126	4.124	4.121	4.119	4.117	4.115	4.113
50	4.150	4.148	4.145	4.143	4.141	4.139	4.137	4.135	4.133	4.131	4.129	4.127	4.125	4.123	4.121	4.119
60	4.155	4.153	4.150	4.148	4.146	4.144	4.142	4.140	4.138	4.136	4.134	4.132	4.130	4.129	4.127	4.125
70	4.160	4.158	4.156	4.154	4.152	4.150	4.148	4.146	4.144	4.142	4.141	4.139	4.137	4.135	4.133	4.131
80	4.167	4.165	4.163	4.161	4.159	4.157	4.155	4.153	4.151	4.149	4.148	4.146	4.144	4.142	4.140	4.138
90	4.175	4.173	4.171	4.169	4.167	4.165	4.163	4.161	4.159	4.158	4.156	4.154	4.152	4.150	4.148	4.146
100	4.185	4.183	4.181	4.179	4.177	4.175	4.173	4.171	4.169	4.167	4.165	4.163	4.161	4.159	4.157	4.155
110	4.197	4.195	4.193	4.191	4.189	4.187	4.185	4.182	4.180	4.178	4.176	4.174	4.172	4.170	4.168	4.166
120	4.212	4.209	4.207	4.205	4.203	4.200	4.198	4.196	4.194	4.191	4.189	4.187	4.185	4.183	4.181	4.179
130	4.228	4.226	4.223	4.221	4.218	4.216	4.214	4.211	4.209	4.207	4.205	4.202	4.200	4.198	4.195	4.193
140	4.247	4.245	4.242	4.239	4.237	4.234	4.232	4.229	4.227	4.224	4.222	4.219	4.217	4.215	4.212	4.210
150	4.269	4.266	4.263	4.261	4.258	4.255	4.252	4.250	4.247	4.244	4.242	4.239	4.236	4.234	4.231	4.229
160	4.294	4.291	4.288	4.285	4.282	4.279	4.276	4.273	4.270	4.267	4.264	4.261	4.258	4.255	4.253	4.250
170	4.322	4.319	4.315	4.312	4.308	4.305	4.302	4.298	4.295	4.292	4.289	4.286	4.283	4.279	4.276	4.273
180	4.354	4.350	4.346	4.342	4.338	4.335	4.331	4.327	4.324	4.320	4.317	4.313	4.310	4.306	4.303	4.300
190	4.389	4.385	4.381	4.376	4.372	4.368	4.364	4.360	4.356	4.352	4.348	4.344	4.340	4.337	4.333	4.329
200	4.430	4.425	4.420	4.415	4.411	4.406	4.401	4.397	4.392	4.388	4.383	4.379	4.375	4.370	4.366	4.362
210	4.476	4.470	4.465	4.459	4.454	4.449	4.443	4.438	4.433	4.428	4.423	4.418	4.413	4.409	4.404	4.399
220	4.529	4.522	4.516	4.510	4.504	4.497	4.491	4.485	4.480	4.474	4.468	4.463	4.457	4.452	4.446	4.441
230	4.590	4.582	4.575	4.568	4.560	4.553	4.546	4.539	4.533	4.526	4.519	4.513	4.507	4.500	4.494	4.488
240	4.661	4.652	4.643	4.634	4.626	4.618	4.609	4.601	4.594	4.586	4.578	4.571	4.563	4.556	4.549	4.542
250	4.744	4.733	4.722	4.712	4.702	4.692	4.683	4.673	4.664	4.655	4.646	4.637	4.628	4.620	4.612	4.604
260	4.842	4.829	4.816	4.804	4.791	4.780	4.768	4.757	4.746	4.735	4.724	4.714	4.704	4.694	4.684	4.674
270	4.960	4.944	4.928	4.913	4.898	4.883	4.869	4.855	4.842	4.828	4.816	4.803	4.791	4.779	4.767	4.756
280	5.105	5.084	5.064	5.044	5.026	5.007	4.990	4.973	4.956	4.940	4.924	4.909	4.894	4.879	4.865	4.852
290	5.286	5.259	5.233	5.207	5.183	5.160	5.137	5.115	5.094	5.074	5.054	5.035	5.017	4.999	4.981	4.964
300	5.521	5.483	5.448	5.414	5.381	5.350	5.321	5.292	5.265	5.239	5.213	5.189	5.166	5.143	5.121	5.100
310	5.937	5.783	5.732	5.684	5.639	5.596	5.556	5.518	5.481	5.446	5.413	5.381	5.350	5.321	5.293	5.266
320	6.291	6.206	6.128	6.056	5.989	5.927	5.869	5.814	5.763	5.715	5.669	5.626	5.585	5.546	5.509	5.473
330	7.015	6.861	6.724	6.602	6.493	6.394	6.304	6.222	6.146	6.075	6.009	5.948	5.891	5.837	5.786	5.738
340	9.082	8.088	7.775	7.519	7.304	7.120	6.961	6.820	6.695	6.583	6.482	6.389	6.304	6.226	6.153	6.086
350	6.973	8.543	11.90	9.677	8.988	8.494	8.117	7.816	7.569	7.361	7.183	7.027	6.889	6.766	6.656	6.555

TABLE 4 SPECIFIC HEAT CAPACITY AT CONSTANT PRESSURE, C_p IN kJ/(kg K)

t(°C) \ p(MPa) --->	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0
360	5.385	6.841	8.156	10.21	15.65	13.41	11.23	10.01	9.203	8.617	8.202	7.921	7.700	7.513	7.353	7.209
370	5.131	5.796	6.648	7.767	9.312	11.68	18.43	61.28	13.49	13.76	11.65	10.43	9.623	9.031	8.586	8.238
380	4.588	5.066	5.658	6.399	7.340	8.559	10.20	13.39	19.66	43.40	73.72	25.66	17.24	13.86	12.02	10.86
390	4.190	4.547	4.974	5.490	6.121	6.898	7.864	9.083	10.65	13.81	18.86	29.44	43.07	36.12	25.15	18.69
400	3.893	4.168	4.488	4.864	5.309	5.840	6.476	7.241	8.167	9.292	10.67	13.50	17.02	22.09	26.99	27.42
410	3.663	3.883	4.133	4.418	4.747	5.129	5.575	6.095	6.705	7.419	8.256	9.237	10.39	12.74	15.05	17.74
420	3.482	3.663	3.864	4.090	4.343	4.631	4.958	5.333	5.761	6.252	6.813	7.453	8.180	9.004	9.932	11.78
430	3.335	3.488	3.655	3.839	4.042	4.267	4.518	4.800	5.116	5.472	5.872	6.320	6.821	7.378	7.995	8.673
440	3.214	3.346	3.488	3.642	3.809	3.991	4.192	4.412	4.655	4.925	5.222	5.552	5.915	6.315	6.752	7.229
450	3.112	3.228	3.351	3.483	3.624	3.776	3.941	4.119	4.313	4.524	4.755	5.007	5.281	5.580	5.904	6.254
460	3.025	3.128	3.236	3.351	3.474	3.603	3.742	3.891	4.050	4.221	4.406	4.605	4.820	5.051	5.300	5.566
470	2.952	3.043	3.140	3.241	3.348	3.461	3.581	3.708	3.842	3.985	4.137	4.300	4.473	4.658	4.855	5.064
480	2.888	2.971	3.057	3.148	3.243	3.342	3.447	3.557	3.673	3.795	3.924	4.060	4.204	4.356	4.516	4.686
490	2.834	2.908	2.986	3.067	3.153	3.241	3.334	3.431	3.533	3.639	3.750	3.867	3.989	4.117	4.252	4.392
500	2.787	2.854	2.925	2.998	3.075	3.155	3.238	3.324	3.414	3.508	3.605	3.707	3.813	3.923	4.038	4.158
510	2.746	2.808	2.872	2.938	3.008	3.080	3.155	3.232	3.313	3.396	3.483	3.573	3.666	3.762	3.862	3.966
520	2.711	2.767	2.826	2.887	2.950	3.015	3.083	3.153	3.225	3.300	3.378	3.458	3.541	3.626	3.714	3.806
530	2.681	2.733	2.786	2.842	2.899	2.959	3.020	3.084	3.149	3.217	3.287	3.359	3.433	3.510	3.588	3.669
540	2.655	2.703	2.752	2.802	2.855	2.909	2.966	3.024	3.083	3.145	3.208	3.273	3.340	3.409	3.480	3.552
550	2.633	2.677	2.722	2.769	2.817	2.867	2.918	2.971	3.026	3.082	3.139	3.199	3.259	3.322	3.385	3.451
560	2.614	2.654	2.696	2.739	2.784	2.830	2.877	2.925	2.975	3.027	3.079	3.133	3.189	3.245	3.303	3.362
570	2.597	2.635	2.674	2.714	2.755	2.797	2.841	2.885	2.931	2.978	3.027	3.076	3.127	3.178	3.231	3.285
580	2.583	2.618	2.654	2.691	2.730	2.769	2.809	2.850	2.893	2.936	2.981	3.026	3.072	3.120	3.168	3.217
590	2.571	2.604	2.638	2.672	2.708	2.744	2.782	2.820	2.859	2.899	2.940	2.982	3.025	3.068	3.112	3.157
600	2.561	2.592	2.623	2.656	2.689	2.723	2.758	2.793	2.830	2.867	2.905	2.943	2.983	3.023	3.064	3.105
610	2.552	2.581	2.611	2.641	2.673	2.704	2.737	2.770	2.804	2.838	2.874	2.909	2.946	2.983	3.021	3.059
620	2.545	2.572	2.600	2.629	2.658	2.688	2.719	2.750	2.781	2.813	2.846	2.880	2.914	2.948	2.983	3.019
630	2.539	2.565	2.591	2.618	2.646	2.674	2.703	2.732	2.761	2.792	2.822	2.853	2.885	2.917	2.950	2.983
640	2.534	2.558	2.583	2.609	2.635	2.662	2.689	2.716	2.744	2.772	2.801	2.830	2.860	2.890	2.921	2.951
650	2.529	2.553	2.577	2.601	2.626	2.651	2.677	2.702	2.729	2.756	2.783	2.810	2.838	2.866	2.895	2.924
660	2.526	2.548	2.571	2.594	2.618	2.642	2.666	2.690	2.715	2.741	2.766	2.792	2.818	2.845	2.872	2.899
670	2.523	2.544	2.566	2.588	2.611	2.633	2.657	2.680	2.704	2.727	2.752	2.776	2.801	2.826	2.851	2.877
680	2.521	2.541	2.562	2.583	2.605	2.626	2.648	2.671	2.693	2.716	2.739	2.762	2.786	2.809	2.833	2.857
690	2.519	2.539	2.559	2.579	2.599	2.620	2.641	2.662	2.684	2.705	2.727	2.750	2.772	2.794	2.817	2.840
700	2.517	2.536	2.556	2.575	2.595	2.615	2.635	2.655	2.676	2.696	2.717	2.738	2.760	2.781	2.803	2.824

TABLE 4 SPECIFIC HEAT CAPACITY AT CONSTANT PRESSURE, C_p IN kJ/(kg K)

t(°C) \ p(MPa) -->	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	42.0	44.0	46.0	48.0	50.0
0	4.073	4.069	4.065	4.060	4.056	4.052	4.048	4.044	4.040	4.036	4.032	4.024	4.016	4.009	4.001	3.994
10	4.086	4.083	4.080	4.077	4.074	4.071	4.068	4.065	4.062	4.060	4.057	4.051	4.046	4.040	4.035	4.030
20	4.097	4.094	4.092	4.089	4.087	4.084	4.082	4.080	4.077	4.075	4.073	4.068	4.064	4.060	4.055	4.051
30	4.105	4.102	4.100	4.098	4.096	4.094	4.092	4.090	4.088	4.086	4.084	4.080	4.076	4.072	4.068	4.065
40	4.111	4.109	4.107	4.105	4.103	4.101	4.099	4.097	4.095	4.094	4.092	4.088	4.084	4.081	4.077	4.074
50	4.117	4.115	4.113	4.111	4.109	4.107	4.106	4.104	4.102	4.100	4.098	4.095	4.091	4.087	4.084	4.081
60	4.123	4.121	4.119	4.117	4.115	4.113	4.112	4.110	4.108	4.106	4.104	4.101	4.097	4.094	4.090	4.087
70	4.129	4.127	4.125	4.124	4.122	4.120	4.118	4.116	4.115	4.113	4.111	4.107	4.104	4.100	4.097	4.094
80	4.136	4.134	4.132	4.131	4.129	4.127	4.125	4.123	4.122	4.120	4.118	4.115	4.111	4.108	4.104	4.101
90	4.144	4.142	4.140	4.139	4.137	4.135	4.133	4.131	4.129	4.128	4.126	4.122	4.119	4.115	4.112	4.108
100	4.153	4.151	4.150	4.148	4.146	4.144	4.142	4.140	4.138	4.136	4.135	4.131	4.127	4.124	4.120	4.117
110	4.164	4.162	4.160	4.158	4.156	4.154	4.152	4.150	4.149	4.147	4.145	4.141	4.137	4.134	4.130	4.126
120	4.177	4.175	4.172	4.170	4.168	4.166	4.164	4.162	4.160	4.158	4.156	4.152	4.149	4.145	4.141	4.137
130	4.191	4.189	4.187	4.184	4.182	4.180	4.178	4.176	4.174	4.172	4.170	4.165	4.161	4.157	4.153	4.149
140	4.207	4.205	4.203	4.200	4.198	4.196	4.194	4.191	4.189	4.187	4.185	4.180	4.176	4.172	4.167	4.163
150	4.226	4.224	4.221	4.219	4.216	4.214	4.211	4.209	4.206	4.204	4.202	4.197	4.192	4.188	4.183	4.179
160	4.247	4.244	4.241	4.239	4.236	4.233	4.231	4.228	4.226	4.223	4.220	4.215	4.210	4.205	4.200	4.196
170	4.270	4.267	4.264	4.261	4.258	4.256	4.253	4.250	4.247	4.244	4.241	4.236	4.230	4.225	4.220	4.214
180	4.296	4.293	4.290	4.286	4.283	4.280	4.277	4.274	4.271	4.268	4.265	4.258	4.253	4.247	4.241	4.235
190	4.325	4.322	4.318	4.314	4.311	4.307	4.304	4.300	4.297	4.294	4.290	4.284	4.277	4.271	4.264	4.258
200	4.358	4.354	4.350	4.346	4.342	4.338	4.334	4.330	4.326	4.323	4.319	4.312	4.304	4.297	4.290	4.284
210	4.394	4.390	4.385	4.381	4.376	4.372	4.368	4.363	4.359	4.355	4.351	4.343	4.335	4.327	4.319	4.312
220	4.436	4.430	4.425	4.420	4.415	4.410	4.406	4.401	4.396	4.391	4.387	4.378	4.369	4.360	4.352	4.343
230	4.482	4.476	4.471	4.465	4.459	4.454	4.448	4.443	4.437	4.432	4.427	4.417	4.407	4.397	4.387	4.378
240	4.535	4.528	4.522	4.515	4.509	4.502	4.496	4.490	4.484	4.478	4.472	4.460	4.449	4.438	4.428	4.417
250	4.596	4.588	4.580	4.573	4.565	4.558	4.551	4.544	4.537	4.530	4.523	4.510	4.497	4.485	4.473	4.461
260	4.665	4.656	4.647	4.638	4.629	4.621	4.612	4.604	4.596	4.588	4.581	4.565	4.551	4.537	4.523	4.510
270	4.745	4.734	4.723	4.713	4.703	4.693	4.683	4.674	4.664	4.655	4.646	4.628	4.611	4.595	4.579	4.564
280	4.838	4.825	4.812	4.800	4.788	4.776	4.764	4.753	4.742	4.731	4.720	4.700	4.680	4.661	4.643	4.626
290	4.948	4.932	4.917	4.902	4.887	4.873	4.859	4.845	4.832	4.819	4.806	4.782	4.759	4.736	4.715	4.695
300	5.080	5.060	5.041	5.022	5.004	4.987	4.970	4.953	4.937	4.921	4.906	4.877	4.849	4.823	4.797	4.773
310	5.240	5.215	5.191	5.167	5.145	5.123	5.102	5.082	5.062	5.043	5.024	4.988	4.955	4.923	4.892	4.864
320	5.439	5.407	5.376	5.346	5.317	5.290	5.263	5.237	5.213	5.189	5.166	5.121	5.080	5.041	5.004	4.969
330	5.693	5.650	5.609	5.569	5.532	5.496	5.462	5.429	5.398	5.368	5.338	5.283	5.232	5.183	5.138	5.095
340	6.022	5.963	5.908	5.855	5.805	5.758	5.713	5.670	5.630	5.591	5.553	5.483	5.418	5.357	5.301	5.248
350	6.463	6.378	6.299	6.227	6.158	6.094	6.034	5.978	5.924	5.873	5.824	5.738	5.651	5.574	5.503	5.437

TABLE 4 SPECIFIC HEAT CAPACITY AT CONSTANT PRESSURE, C_p IN kJ/(kg K)

	p(MPa) --->															
t(°C)	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0	39.0	40.0	42.0	44.0	46.0	48.0	50.0
360	7.078	6.958	6.845	6.735	6.631	6.532	6.445	6.361	6.285	6.209	6.140	6.018	5.906	5.801	5.712	5.630
370	7.939	7.690	7.489	7.317	7.164	7.021	6.882	6.764	6.654	6.545	6.447	6.270	6.112	5.970	5.864	5.746
380	10.02	9.403	8.947	8.593	8.305	8.053	7.812	7.619	7.446	7.281	7.133	6.876	6.658	6.470	6.346	6.193
390	15.19	13.10	11.72	10.74	10.02	9.451	8.998	8.626	8.315	8.049	7.820	7.443	7.144	6.901	6.698	6.526
400	24.48	20.83	17.64	15.22	13.45	12.16	11.19	10.43	9.833	9.346	8.942	8.310	7.838	7.470	7.174	6.930
410	20.06	20.92	20.30	18.93	17.31	15.72	14.28	13.07	12.06	11.24	10.56	9.517	8.771	8.211	7.777	7.430
420	13.30	14.87	16.16	16.84	16.84	16.36	15.62	14.77	13.90	13.05	12.27	10.93	9.901	9.115	8.506	8.027
430	9.413	10.22	11.82	12.81	13.62	14.12	14.28	14.15	13.83	13.39	12.90	11.86	10.86	9.994	9.268	8.672
440	7.744	8.297	8.887	9.511	10.16	11.26	11.81	12.18	12.36	12.38	12.26	11.77	11.14	10.46	9.808	9.210
450	6.630	7.032	7.459	7.909	8.379	8.868	9.371	9.884	10.45	10.74	10.91	10.95	10.72	10.34	9.899	9.437
460	5.851	6.154	6.474	6.810	7.161	7.526	7.902	8.286	8.677	9.073	9.470	9.785	9.892	9.799	9.584	9.302
470	5.287	5.521	5.769	6.028	6.298	6.578	6.866	7.160	7.460	7.763	8.068	8.680	8.908	9.038	9.024	8.911
480	4.865	5.053	5.249	5.455	5.668	5.889	6.116	6.347	6.583	6.820	7.059	7.536	8.006	8.468	8.352	8.381
490	4.540	4.694	4.855	5.023	5.196	5.375	5.558	5.745	5.936	6.127	6.320	6.702	7.076	7.436	7.783	8.122
500	4.283	4.412	4.547	4.687	4.831	4.979	5.132	5.287	5.445	5.604	5.764	6.082	6.390	6.683	6.959	7.218
510	4.073	4.185	4.300	4.419	4.541	4.667	4.796	4.927	5.061	5.197	5.333	5.604	5.869	6.120	6.353	6.565
520	3.899	3.996	4.096	4.199	4.305	4.413	4.524	4.638	4.753	4.870	4.988	5.225	5.458	5.681	5.889	6.077
530	3.752	3.838	3.926	4.016	4.108	4.203	4.300	4.399	4.499	4.602	4.705	4.914	5.121	5.323	5.515	5.690
540	3.626	3.702	3.781	3.860	3.942	4.026	4.111	4.198	4.287	4.377	4.468	4.653	4.839	5.023	5.200	5.367
550	3.517	3.586	3.656	3.727	3.800	3.874	3.950	4.027	4.106	4.186	4.267	4.431	4.598	4.765	4.929	5.087
560	3.422	3.484	3.547	3.611	3.677	3.743	3.811	3.880	3.950	4.022	4.094	4.241	4.391	4.542	4.692	4.839
570	3.340	3.396	3.453	3.511	3.570	3.630	3.691	3.753	3.816	3.880	3.944	4.076	4.211	4.347	4.484	4.619
580	3.267	3.318	3.370	3.423	3.476	3.531	3.586	3.642	3.699	3.756	3.814	3.933	4.054	4.177	4.300	4.424
590	3.203	3.250	3.297	3.345	3.394	3.444	3.494	3.545	3.596	3.648	3.701	3.808	3.917	4.028	4.140	4.252
600	3.147	3.190	3.233	3.278	3.322	3.367	3.413	3.459	3.506	3.554	3.601	3.698	3.797	3.897	3.999	4.101
610	3.098	3.137	3.177	3.218	3.259	3.300	3.342	3.385	3.427	3.471	3.514	3.603	3.692	3.783	3.875	3.967
620	3.055	3.091	3.128	3.165	3.203	3.241	3.280	3.319	3.358	3.398	3.438	3.518	3.600	3.683	3.766	3.850
630	3.016	3.050	3.084	3.119	3.154	3.189	3.225	3.261	3.297	3.333	3.370	3.444	3.519	3.595	3.671	3.748
640	2.983	3.014	3.046	3.078	3.111	3.143	3.176	3.210	3.243	3.277	3.311	3.379	3.448	3.517	3.587	3.657
650	2.953	2.982	3.012	3.042	3.072	3.103	3.133	3.164	3.196	3.227	3.258	3.322	3.385	3.449	3.514	3.578
660	2.926	2.954	2.982	3.010	3.038	3.067	3.095	3.124	3.153	3.183	3.212	3.271	3.330	3.389	3.449	3.508
670	2.903	2.929	2.955	2.981	3.008	3.035	3.062	3.089	3.116	3.143	3.171	3.226	3.281	3.336	3.391	3.447
680	2.882	2.906	2.931	2.956	2.981	3.006	3.032	3.057	3.083	3.108	3.134	3.185	3.237	3.289	3.341	3.392
690	2.863	2.886	2.910	2.933	2.957	2.981	3.005	3.029	3.053	3.077	3.101	3.150	3.198	3.247	3.295	3.344
700	2.846	2.868	2.891	2.913	2.935	2.958	2.981	3.003	3.026	3.049	3.072	3.118	3.164	3.209	3.255	3.301

TABLE 5 DYNAMIC VISCOSITY μ IN 10^{-4} Pa.s

t(°C) \ p(MPa) --->	0.05	0.1	0.5	1.0	2.5	5.0	7.5	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
0	1792	1792	1791	1790	1786	1781	1775	1770	1759	1749	1740	1731	1722	1714	1707	1700
10	1308	1308	1307	1307	1305	1303	1301	1298	1294	1290	1286	1283	1279	1276	1274	1271
20	1003	1003	1003	1002	1002	1001	1000	999.2	997.6	996.2	994.9	993.8	992.8	991.9	991.2	990.6
30	797.8	797.8	797.7	797.7	797.6	797.4	797.2	797.1	796.8	796.7	796.6	796.6	796.7	796.9	797.2	797.5
40	653.2	653.2	653.2	653.2	653.3	653.5	653.7	654.0	654.4	654.9	655.5	656.1	656.8	657.5	658.3	659.1
50	547.1	547.1	547.2	547.3	547.5	547.9	548.3	548.7	549.6	550.5	551.4	552.3	553.3	554.3	555.4	556.4
60	466.8	466.8	466.9	467.0	467.3	467.9	468.4	468.9	470.0	471.1	472.2	473.4	474.5	475.7	476.9	478.1
70	404.5	404.5	404.6	404.7	405.0	405.7	406.3	406.9	408.1	409.3	410.5	411.8	413.0	414.3	415.6	416.9
80	355.0	355.0	355.1	355.2	355.6	356.2	356.9	357.5	358.8	360.1	361.4	362.7	364.0	365.3	366.7	368.0
90	11.95	315.0	315.1	315.2	315.6	316.3	317.0	317.6	319.0	320.3	321.6	322.9	324.3	325.6	326.9	328.3
100	12.31	12.28	282.3	282.4	282.8	283.5	284.2	284.9	286.2	287.5	288.9	290.2	291.6	292.9	294.2	295.6
110	12.68	12.65	255.0	255.2	255.6	256.3	256.9	257.6	259.0	260.3	261.6	263.0	264.3	265.6	267.0	268.3
120	13.06	13.03	232.1	232.3	232.7	233.4	234.0	234.7	236.0	237.4	238.7	240.0	241.3	242.6	244.0	245.3
130	13.44	13.41	212.7	212.9	213.3	214.0	214.6	215.3	216.6	217.9	219.2	220.5	221.8	223.1	224.4	225.7
140	13.82	13.80	196.2	196.3	196.7	197.4	198.0	198.7	200.0	201.3	202.6	203.8	205.1	206.4	207.6	208.9
150	14.21	14.19	181.9	182.0	182.4	183.1	183.7	184.4	185.7	186.9	188.2	189.5	190.7	191.9	193.2	194.4
160	14.60	14.58	14.42	169.6	170.0	170.7	171.3	172.0	173.2	174.5	175.7	177.0	178.2	179.4	180.6	181.8
170	15.00	14.98	14.83	158.8	159.2	159.9	160.5	161.1	162.4	163.6	164.9	166.1	167.3	168.5	169.7	170.8
180	15.39	15.38	15.24	15.07	149.7	150.4	151.0	151.6	152.9	154.1	155.3	156.5	157.7	158.9	160.0	161.2
190	15.79	15.78	15.66	15.50	141.3	142.0	142.6	143.2	144.5	145.7	146.9	148.1	149.2	150.4	151.5	152.7
200	16.19	16.18	16.07	15.93	133.8	134.5	135.1	135.7	137.0	138.2	139.4	140.5	141.7	142.9	144.0	145.1
210	16.60	16.59	16.49	16.36	127.1	127.7	128.4	129.0	130.2	131.5	132.7	133.8	135.0	136.1	137.2	138.4
220	17.00	16.99	16.90	16.79	121.0	121.7	122.3	122.9	124.2	125.4	126.6	127.8	128.9	130.1	131.2	132.3
230	17.41	17.40	17.32	17.22	16.91	116.1	116.7	117.4	118.7	119.9	121.1	122.3	123.5	124.6	125.7	126.8
240	17.82	17.81	17.74	17.64	17.37	110.9	111.6	112.3	113.6	114.8	116.1	117.3	118.4	119.6	120.7	121.8
250	18.23	18.22	18.15	18.07	17.83	106.1	106.8	107.5	108.9	110.2	111.4	112.6	113.8	115.0	116.1	117.2
260	18.64	18.63	18.57	18.50	18.28	101.6	102.3	103.0	104.4	105.8	107.1	108.3	109.6	110.7	111.9	113.0
270	19.05	19.05	18.99	18.92	18.73	18.43	97.99	98.76	100.2	101.6	103.0	104.3	105.6	106.8	107.9	109.1
280	19.47	19.46	19.41	19.35	19.17	18.92	93.78	94.61	96.19	97.68	99.10	100.5	101.8	103.0	104.2	105.4
290	19.88	19.88	19.83	19.77	19.62	19.39	89.60	90.51	92.23	93.83	95.34	96.77	98.13	99.44	100.7	101.9
300	20.30	20.29	20.25	20.20	20.06	19.86	19.74	86.39	88.30	90.05	91.67	93.19	94.63	96.00	97.31	98.57
310	20.71	20.71	20.67	20.62	20.50	20.33	20.23	82.13	84.31	86.26	88.04	89.68	91.21	92.66	94.04	95.35
320	21.13	21.12	21.09	21.05	20.94	20.79	20.71	20.76	80.17	82.40	84.38	86.18	87.84	89.38	90.84	92.21
330	21.54	21.54	21.51	21.47	21.37	21.25	21.19	21.24	75.70	78.38	80.65	82.66	84.47	86.13	87.68	89.14
340	21.96	21.95	21.93	21.90	21.81	21.70	21.66	21.71	70.56	74.05	76.77	79.05	81.06	82.88	84.55	86.10
350	22.37	22.37	22.35	22.32	22.24	22.16	22.13	22.18	22.91	69.13	72.61	75.31	77.59	79.59	81.40	83.06

TABLE 5 DYNAMIC VISCOSITY μ IN 10^{-4}Pa.s

	p(MPa) --->															
t(°C)	0.05	0.1	0.5	1.0	2.5	5.0	7.5	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
360	22.79	22.79	22.77	22.74	22.68	22.60	22.59	22.65	23.25	62.57	67.92	71.36	74.04	76.30	78.29	80.08
370	23.20	23.20	23.18	23.16	23.11	23.05	23.05	23.12	23.64	26.16	62.03	66.94	70.28	72.92	75.16	77.12
380	23.62	23.62	23.60	23.58	23.54	23.50	23.50	23.58	24.05	25.68	51.72	61.67	66.16	69.36	71.93	74.12
390	24.04	24.03	24.02	24.01	23.97	23.94	23.96	24.04	24.48	25.74	31.55	54.39	61.44	65.54	68.58	71.07
400	24.45	24.45	24.44	24.43	24.40	24.38	24.40	24.49	24.91	25.96	28.98	43.38	55.65	61.31	65.05	67.94
410	24.87	24.86	24.86	24.84	24.82	24.81	24.85	24.94	25.35	26.27	28.43	35.34	48.54	56.49	61.24	64.67
420	25.28	25.28	25.27	25.26	25.25	25.25	25.30	25.39	25.79	26.61	28.33	32.38	41.87	51.15	57.13	61.23
430	25.69	25.69	25.69	25.68	25.67	25.68	25.74	25.84	26.23	26.99	28.43	31.31	37.52	46.01	52.82	57.65
440	26.11	26.11	26.10	26.10	26.09	26.12	26.18	26.28	26.66	27.37	28.63	30.90	35.16	41.95	48.70	54.04
450	26.52	26.52	26.52	26.51	26.52	26.55	26.61	26.72	27.10	27.77	28.89	30.78	33.98	39.15	45.21	50.62
460	26.93	26.93	26.93	26.93	26.94	26.98	27.05	27.16	27.54	28.18	29.20	30.82	33.40	37.36	42.51	47.62
470	27.34	27.34	27.34	27.34	27.36	27.40	27.48	27.60	27.97	28.58	29.53	30.96	33.12	36.29	40.55	45.17
480	27.75	27.75	27.76	27.76	27.78	27.83	27.91	28.03	28.41	29.00	29.88	31.17	33.04	35.67	39.18	43.26
490	28.16	28.16	28.17	28.17	28.19	28.25	28.34	28.47	28.84	29.41	30.24	31.42	33.07	35.33	38.27	41.82
500	28.57	28.57	28.58	28.58	28.61	28.67	28.77	28.90	29.27	29.82	30.61	31.70	33.19	35.17	37.70	40.75
510	28.98	28.98	28.99	28.99	29.02	29.09	29.19	29.32	29.69	30.24	30.99	32.01	33.36	35.13	37.35	40.01
520	29.39	29.39	29.40	29.40	29.44	29.51	29.62	29.75	30.12	30.65	31.37	32.33	33.58	35.17	37.15	39.51
530	29.79	29.80	29.80	29.81	29.85	29.93	30.04	30.17	30.54	31.06	31.76	32.67	33.83	35.28	37.07	39.18
540	30.20	30.20	30.21	30.22	30.26	30.34	30.46	30.60	30.97	31.48	32.15	33.01	34.10	35.45	37.07	38.98
550	30.60	30.61	30.62	30.63	30.67	30.76	30.87	31.02	31.39	31.89	32.54	33.37	34.39	35.64	37.14	38.88
560	31.01	31.01	31.02	31.03	31.08	31.17	31.29	31.43	31.80	32.30	32.93	33.73	34.70	35.87	37.26	38.86
570	31.41	31.41	31.42	31.44	31.49	31.58	31.70	31.85	32.22	32.71	33.32	34.09	35.02	36.12	37.41	38.90
580	31.81	31.81	31.83	31.84	31.89	31.99	32.12	32.26	32.63	33.11	33.72	34.46	35.34	36.39	37.60	38.99
590	32.21	32.22	32.23	32.24	32.30	32.40	32.53	32.68	33.05	33.52	34.11	34.83	35.68	36.67	37.82	39.11
600	32.61	32.62	32.63	32.64	32.70	32.81	32.94	33.09	33.46	33.93	34.50	35.20	36.02	36.97	38.05	39.27
610	33.01	33.01	33.03	33.04	33.10	33.21	33.34	33.49	33.86	34.33	34.89	35.57	36.36	37.27	38.31	39.46
620	33.41	33.41	33.43	33.44	33.50	33.62	33.75	33.90	34.27	34.73	35.29	35.94	36.71	37.58	38.57	39.67
630	33.81	33.81	33.82	33.84	33.90	34.02	34.15	34.31	34.68	35.13	35.68	36.32	37.06	37.90	38.85	39.90
640	34.20	34.20	34.22	34.24	34.30	34.42	34.55	34.71	35.08	35.53	36.07	36.69	37.41	38.23	39.14	40.14
650	34.60	34.60	34.61	34.63	34.70	34.82	34.96	35.11	35.48	35.93	36.45	37.07	37.77	38.56	39.43	40.39
660	34.99	34.99	35.01	35.03	35.09	35.21	35.35	35.51	35.88	36.32	36.84	37.44	38.12	38.89	39.73	40.66
670	35.38	35.38	35.40	35.42	35.49	35.61	35.75	35.91	36.28	36.72	37.23	37.82	38.48	39.22	40.04	40.93
680	35.77	35.77	35.79	35.81	35.88	36.01	36.15	36.31	36.67	37.11	37.61	38.19	38.84	39.56	40.35	41.21
690	36.16	36.16	36.18	36.20	36.27	36.40	36.54	36.70	37.07	37.50	38.00	38.56	39.19	39.90	40.66	41.49
700	36.55	36.55	36.57	36.59	36.66	36.79	36.94	37.09	37.46	37.89	38.38	38.93	39.55	40.24	40.98	41.79

TABLE 6 KINEMATIC VISCOSITY ν IN $10^{-6}m^2/s$

t(°C) \ p(MPa) -->	0.05	0.1	0.5	1.0	2.5	5.0	7.5	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
0	1.792	1.792	1.791	1.789	1.784	1.777	1.769	1.761	1.747	1.732	1.719	1.706	1.694	1.682	1.671	1.660
10	1.308	1.308	1.307	1.306	1.304	1.300	1.296	1.293	1.285	1.278	1.272	1.266	1.260	1.254	1.248	1.243
20	1.004	1.004	1.004	1.004	1.002	1.000	0.998	0.996	0.993	0.989	0.986	0.982	0.979	0.976	0.974	0.971
30	0.801	0.801	0.801	0.801	0.800	0.799	0.798	0.797	0.795	0.793	0.791	0.790	0.788	0.787	0.786	0.784
40	0.658	0.658	0.658	0.658	0.658	0.657	0.657	0.656	0.655	0.654	0.654	0.653	0.652	0.652	0.651	0.651
50	0.554	0.554	0.554	0.554	0.554	0.553	0.553	0.553	0.553	0.552	0.552	0.552	0.552	0.552	0.552	0.552
60	0.475	0.475	0.475	0.475	0.475	0.475	0.475	0.475	0.475	0.475	0.475	0.475	0.476	0.476	0.476	0.476
70	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.415	0.415	0.415	0.416	0.416	0.417	0.417	0.417
80	0.365	0.365	0.365	0.365	0.366	0.366	0.366	0.366	0.367	0.367	0.368	0.368	0.369	0.369	0.370	0.371
90	39.71	0.326	0.326	0.326	0.327	0.327	0.327	0.328	0.328	0.329	0.329	0.330	0.331	0.331	0.332	0.333
100	42.09	20.82	0.295	0.295	0.295	0.295	0.296	0.296	0.297	0.297	0.298	0.299	0.299	0.300	0.301	0.301
110	44.56	22.07	0.268	0.268	0.268	0.269	0.269	0.270	0.270	0.271	0.272	0.273	0.273	0.274	0.275	0.276
120	47.11	23.36	0.246	0.246	0.246	0.247	0.247	0.248	0.248	0.249	0.250	0.251	0.251	0.252	0.253	0.254
130	49.74	24.69	0.228	0.228	0.228	0.228	0.229	0.229	0.230	0.231	0.231	0.232	0.233	0.234	0.235	0.235
140	52.46	26.06	0.212	0.212	0.212	0.213	0.213	0.213	0.214	0.215	0.216	0.217	0.217	0.218	0.219	0.220
150	55.27	27.47	0.198	0.198	0.199	0.199	0.200	0.200	0.201	0.201	0.202	0.203	0.204	0.205	0.205	0.206
160	58.15	28.93	5.529	0.187	0.187	0.188	0.188	0.188	0.189	0.190	0.191	0.192	0.192	0.193	0.194	0.195
170	61.13	30.42	5.844	0.177	0.177	0.178	0.178	0.178	0.179	0.180	0.181	0.182	0.182	0.183	0.184	0.185
180	64.18	31.96	6.166	2.930	0.169	0.169	0.169	0.170	0.171	0.171	0.172	0.173	0.174	0.174	0.175	0.176
190	67.32	33.53	6.494	3.104	0.161	0.162	0.162	0.162	0.163	0.164	0.165	0.165	0.166	0.167	0.168	0.168
200	70.54	35.15	6.830	3.281	0.155	0.155	0.155	0.156	0.157	0.157	0.158	0.159	0.160	0.160	0.161	0.162
210	73.84	36.81	7.172	3.460	0.149	0.149	0.150	0.150	0.151	0.152	0.152	0.153	0.154	0.155	0.155	0.156
220	77.23	38.50	7.521	3.642	0.144	0.144	0.145	0.145	0.146	0.147	0.147	0.148	0.149	0.150	0.150	0.151
230	80.70	40.24	7.878	3.827	1.380	0.140	0.140	0.141	0.141	0.142	0.143	0.144	0.144	0.145	0.146	0.146
240	84.25	42.02	8.242	4.015	1.465	0.136	0.136	0.137	0.138	0.138	0.139	0.140	0.141	0.141	0.142	0.143
250	87.88	43.84	8.613	4.206	1.551	0.133	0.133	0.133	0.134	0.135	0.136	0.136	0.137	0.138	0.138	0.139
260	91.59	45.70	8.992	4.400	1.636	0.130	0.130	0.130	0.131	0.132	0.133	0.133	0.134	0.135	0.135	0.136
270	95.38	47.60	9.378	4.598	1.722	0.747	0.127	0.128	0.128	0.129	0.130	0.131	0.131	0.132	0.133	0.133
280	99.26	49.54	9.772	4.799	1.809	0.799	0.125	0.125	0.126	0.127	0.127	0.128	0.129	0.130	0.130	0.131
290	103.2	51.52	10.17	5.003	1.896	0.849	0.122	0.123	0.124	0.125	0.125	0.126	0.127	0.127	0.128	0.129
300	107.2	53.54	10.58	5.211	1.984	0.900	0.527	0.121	0.122	0.123	0.123	0.124	0.125	0.126	0.126	0.127
310	111.4	55.60	11.00	5.422	2.073	0.950	0.567	0.119	0.120	0.121	0.122	0.122	0.123	0.124	0.125	0.125
320	115.5	57.70	11.42	5.637	2.164	1.000	0.606	0.400	0.118	0.119	0.120	0.121	0.122	0.122	0.123	0.124
330	119.8	59.83	11.85	5.856	2.255	1.050	0.643	0.434	0.117	0.118	0.119	0.119	0.120	0.121	0.122	0.122
340	124.2	62.01	12.29	6.078	2.348	1.100	0.680	0.466	0.115	0.116	0.117	0.118	0.119	0.120	0.120	0.121
350	128.6	64.22	12.74	6.304	2.441	1.151	0.717	0.497	0.263	0.115	0.116	0.117	0.118	0.119	0.119	0.120

TABLE 6 KINEMATIC VISCOSITY ν IN $10^{-6}m^2/s$

t(°C) \ p(MPa) -->	0.05	0.1	0.5	1.0	2.5	5.0	7.5	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
360	133.1	66.47	13.19	6.533	2.536	1.202	0.754	0.528	0.292	0.118	0.115	0.116	0.117	0.118	0.118	0.119
370	137.6	68.76	13.65	6.766	2.632	1.253	0.791	0.558	0.319	0.181	0.115	0.116	0.116	0.117	0.118	0.118
380	142.3	71.09	14.12	7.002	2.730	1.304	0.828	0.588	0.343	0.212	0.116	0.116	0.116	0.117	0.117	0.118
390	147.0	73.45	14.60	7.242	2.828	1.356	0.864	0.617	0.367	0.236	0.145	0.117	0.116	0.117	0.117	0.117
400	151.8	75.85	15.08	7.486	2.928	1.409	0.901	0.647	0.390	0.258	0.174	0.123	0.117	0.117	0.117	0.117
410	156.7	78.29	15.57	7.733	3.030	1.462	0.938	0.676	0.413	0.279	0.196	0.140	0.121	0.118	0.118	0.118
420	161.6	80.77	16.07	7.984	3.132	1.515	0.976	0.706	0.435	0.298	0.215	0.159	0.129	0.121	0.119	0.119
430	166.7	83.28	16.58	8.239	3.236	1.569	1.013	0.735	0.457	0.317	0.232	0.177	0.141	0.126	0.122	0.120
440	171.8	85.83	17.09	8.496	3.342	1.624	1.051	0.765	0.478	0.335	0.249	0.192	0.155	0.134	0.126	0.123
450	176.9	88.41	17.61	8.758	3.448	1.679	1.090	0.795	0.500	0.353	0.265	0.207	0.168	0.144	0.132	0.126
460	182.2	91.03	18.14	9.023	3.556	1.735	1.128	0.825	0.522	0.371	0.281	0.222	0.181	0.155	0.139	0.131
470	187.5	93.69	18.67	9.291	3.666	1.791	1.167	0.855	0.543	0.388	0.296	0.235	0.194	0.165	0.147	0.137
480	192.8	96.38	19.21	9.563	3.776	1.848	1.206	0.885	0.565	0.406	0.311	0.249	0.206	0.176	0.156	0.143
490	198.3	99.11	19.76	9.839	3.888	1.906	1.246	0.916	0.587	0.423	0.326	0.262	0.218	0.187	0.165	0.150
500	203.8	101.9	20.31	10.12	4.001	1.964	1.285	0.947	0.609	0.441	0.341	0.275	0.230	0.197	0.174	0.158
510	209.4	104.7	20.87	10.40	4.116	2.023	1.326	0.978	0.630	0.458	0.355	0.288	0.241	0.208	0.184	0.166
520	215.1	107.5	21.44	10.69	4.232	2.082	1.366	1.009	0.652	0.475	0.370	0.301	0.253	0.218	0.193	0.174
530	220.8	110.4	22.02	10.97	4.349	2.142	1.407	1.040	0.675	0.493	0.385	0.314	0.264	0.229	0.202	0.182
540	226.6	113.3	22.60	11.27	4.468	2.203	1.449	1.072	0.697	0.510	0.399	0.327	0.276	0.239	0.211	0.191
550	232.5	116.2	23.19	11.56	4.588	2.264	1.490	1.104	0.719	0.528	0.414	0.339	0.287	0.249	0.220	0.199
560	238.4	119.2	23.78	11.86	4.709	2.326	1.532	1.136	0.741	0.545	0.429	0.352	0.298	0.259	0.230	0.207
570	244.4	122.2	24.39	12.16	4.831	2.388	1.575	1.169	0.764	0.563	0.443	0.365	0.309	0.269	0.239	0.215
580	250.5	125.2	24.99	12.47	4.955	2.451	1.618	1.202	0.787	0.581	0.458	0.377	0.321	0.279	0.248	0.224
590	256.6	128.3	25.61	12.78	5.080	2.515	1.661	1.235	0.810	0.598	0.473	0.390	0.332	0.289	0.257	0.232
600	262.8	131.4	26.23	13.09	5.206	2.579	1.704	1.268	0.833	0.616	0.487	0.403	0.343	0.299	0.266	0.240
610	269.0	134.5	26.86	13.41	5.333	2.644	1.748	1.301	0.856	0.634	0.502	0.415	0.354	0.309	0.275	0.248
620	275.4	137.7	27.49	13.72	5.462	2.709	1.793	1.335	0.879	0.652	0.517	0.428	0.365	0.319	0.284	0.256
630	281.8	140.9	28.13	14.05	5.592	2.775	1.838	1.369	0.902	0.670	0.532	0.441	0.376	0.329	0.293	0.265
640	288.2	144.1	28.78	14.37	5.723	2.842	1.883	1.404	0.926	0.688	0.547	0.454	0.388	0.339	0.302	0.273
650	294.7	147.3	29.44	14.70	5.855	2.909	1.928	1.438	0.950	0.707	0.562	0.466	0.399	0.349	0.311	0.281
660	301.3	150.6	30.10	15.03	5.989	2.977	1.974	1.473	0.974	0.725	0.577	0.479	0.410	0.359	0.320	0.289
670	308.0	154.0	30.76	15.36	6.124	3.045	2.020	1.508	0.998	0.744	0.592	0.492	0.422	0.369	0.329	0.298
680	314.7	157.3	31.43	15.70	6.260	3.114	2.067	1.544	1.022	0.762	0.608	0.505	0.433	0.379	0.338	0.306
690	321.4	160.7	32.11	16.04	6.397	3.184	2.114	1.579	1.046	0.781	0.623	0.518	0.444	0.389	0.347	0.314
700	328.3	164.1	32.80	16.38	6.536	3.254	2.161	1.615	1.071	0.800	0.638	0.531	0.456	0.400	0.356	0.323

TABLE 7 THERMAL CONDUCTIVITY λ IN 10^{-3}W/(m.K)

	p(MPa) --->															
t(°C)	0.05	0.1	0.5	1.0	2.5	5.0	7.5	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
0	561.9	562.0	562.2	562.5	563.4	564.8	566.3	567.7	570.6	573.5	576.4	579.2	582.0	584.8	587.6	590.4
10	582.0	582.0	582.3	582.5	583.4	584.8	586.1	587.5	590.3	593.0	595.7	598.4	601.0	603.7	606.3	608.9
20	599.6	599.6	599.8	600.1	600.9	602.3	603.6	604.9	607.5	610.2	612.7	615.3	617.9	620.4	622.9	625.4
30	615.1	615.1	615.3	615.6	616.3	617.7	619.0	620.3	622.8	625.4	627.9	630.4	632.9	635.3	637.8	640.2
40	628.6	628.7	628.9	629.1	629.9	631.2	632.5	633.8	636.3	638.8	641.3	643.8	646.2	648.7	651.1	653.4
50	640.5	640.5	640.7	641.0	641.8	643.0	644.3	645.6	648.2	650.7	653.2	655.6	658.0	660.5	662.8	665.2
60	650.7	650.7	650.9	651.2	652.0	653.3	654.6	655.9	658.5	661.0	663.5	665.9	668.4	670.8	673.2	675.6
70	659.4	659.5	659.7	660.0	660.8	662.1	663.4	664.7	667.3	669.9	672.4	674.9	677.3	679.8	682.2	684.6
80	666.8	666.8	667.0	667.3	668.1	669.4	670.8	672.1	674.8	677.4	679.9	682.5	685.0	687.4	689.9	692.3
90	23.64	672.8	673.0	673.3	674.1	675.5	676.9	678.2	680.9	683.6	686.2	688.8	691.3	693.9	696.3	698.8
100	24.42	24.78	677.7	678.0	678.8	680.2	681.7	683.1	685.8	688.5	691.2	693.9	696.5	699.1	701.6	704.1
110	25.24	25.51	681.2	681.4	682.3	683.8	685.3	686.7	689.5	692.3	695.1	697.8	700.5	703.1	705.8	708.3
120	26.07	26.29	683.4	683.8	684.7	686.2	687.7	689.2	692.1	695.0	697.9	700.7	703.4	706.1	708.8	711.4
130	26.92	27.10	684.6	684.9	685.9	687.4	689.0	690.5	693.6	696.6	699.5	702.4	705.2	708.0	710.8	713.5
140	27.79	27.94	684.6	685.0	686.0	687.6	689.2	690.8	694.0	697.1	700.1	703.1	706.1	708.9	711.8	714.6
150	28.67	28.80	683.6	683.9	685.0	686.7	688.4	690.0	693.3	696.5	699.7	702.8	705.9	708.9	711.8	714.7
160	29.57	29.68	31.42	681.8	682.9	684.7	686.5	688.2	691.6	695.0	698.3	701.5	704.7	707.8	710.9	713.9
170	30.48	30.58	32.00	678.7	679.8	681.7	683.5	685.4	689.0	692.5	695.9	699.3	702.6	705.8	709.0	712.1
180	31.41	31.49	32.68	35.41	675.7	677.6	679.6	681.5	685.3	689.0	692.6	696.1	699.6	703.0	706.3	709.5
190	32.34	32.42	33.43	35.64	670.5	672.6	674.6	676.7	680.7	684.6	688.3	692.0	695.6	699.2	702.6	706.0
200	33.29	33.37	34.24	36.06	664.2	666.5	668.7	670.8	675.0	679.2	683.1	687.0	690.8	694.5	698.1	701.7
210	34.26	34.32	35.09	36.62	656.9	659.3	661.6	664.0	668.4	672.8	677.0	681.1	685.1	689.0	692.8	696.5
220	35.23	35.29	35.98	37.28	648.5	651.1	653.6	656.1	660.9	665.5	670.0	674.3	678.6	682.7	686.7	690.6
230	36.22	36.28	36.90	38.03	43.98	641.7	644.4	647.1	652.3	657.2	662.0	666.6	671.1	675.5	679.7	683.8
240	37.21	37.27	37.84	38.83	43.81	631.2	634.2	637.0	642.6	648.0	653.1	658.0	662.8	667.4	671.9	676.2
250	38.22	38.28	38.81	39.69	43.92	619.5	622.7	625.8	631.9	637.7	643.2	648.5	653.6	658.5	663.3	667.9
260	39.25	39.30	39.79	40.59	44.24	606.3	609.9	613.4	620.0	626.3	632.3	638.0	643.5	648.8	653.9	658.8
270	40.28	40.33	40.80	41.53	44.73	54.71	595.7	599.6	606.9	613.8	620.4	626.6	632.5	638.2	643.6	648.9
280	41.32	41.37	41.81	42.49	45.34	53.70	579.9	584.3	592.5	600.1	607.3	614.1	620.6	626.7	632.5	638.2
290	42.38	42.42	42.85	43.48	46.04	53.19	562.3	567.3	576.5	585.1	593.1	600.6	607.6	614.3	620.6	626.6
300	43.44	43.49	43.89	44.49	46.83	53.04	64.06	548.2	558.9	568.6	577.5	585.8	593.6	600.9	607.8	614.3
310	44.52	44.56	44.95	45.52	47.67	53.16	62.34	526.8	539.3	550.4	560.5	569.8	578.4	586.4	594.0	601.1
320	45.60	45.65	46.03	46.56	48.56	53.48	61.32	74.72	517.3	530.3	541.9	552.4	562.0	570.9	579.2	587.0
330	46.70	46.74	47.11	47.62	49.50	53.95	60.77	71.71	492.2	507.9	521.5	533.5	544.3	554.2	563.3	571.8
340	47.81	47.85	48.21	48.70	50.47	54.54	60.57	69.80	462.9	482.7	498.9	512.8	525.1	536.2	546.3	555.7
350	48.93	48.97	49.32	49.79	51.46	55.22	60.62	68.57	104.2	453.8	473.7	490.1	504.3	516.8	528.1	538.4

TABLE 7 THERMAL CONDUCTIVITY λ IN 10^{-3}W/(m.K)

	p(MPa)															
t(°C)	0.05	0.1	0.5	1.0	2.5	5.0	7.5	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
360	50.06	50.10	50.44	50.89	52.48	55.95	60.80	67.75	95.67	419.5	445.1	465.3	481.9	496.3	509.0	520.4
370	51.19	51.23	51.57	52.01	53.52	56.70	60.98	66.87	88.85	179.9	409.8	436.6	457.2	474.1	488.7	501.6
380	52.34	52.38	52.71	53.14	54.59	57.59	61.50	66.68	83.97	129.6	390.7	405.1	430.1	450.2	467.0	481.5
390	53.50	53.54	53.86	54.28	55.69	58.55	62.21	66.93	81.56	112.2	228.5	376.5	402.5	425.2	444.2	460.6
400	54.67	54.71	55.02	55.43	56.79	59.53	62.95	67.26	79.96	103.4	159.8	326.0	372.6	398.8	420.4	438.8
410	55.85	55.88	56.19	56.59	57.92	60.53	63.75	67.73	79.00	98.08	136.0	234.4	335.3	370.2	395.2	415.9
420	57.03	57.07	57.37	57.77	59.05	61.57	64.61	68.32	78.47	94.65	123.3	182.0	282.4	338.3	368.6	392.0
430	58.23	58.27	58.56	58.95	60.20	62.63	65.52	69.00	78.27	92.35	115.3	156.3	230.1	300.7	340.2	367.2
440	59.44	59.47	59.76	60.14	61.37	63.71	66.47	69.75	78.31	90.81	110.0	141.4	193.7	260.7	309.6	341.6
450	60.65	60.69	60.97	61.35	62.54	64.81	67.46	70.57	78.53	89.80	106.3	131.6	170.9	226.0	278.0	315.3
460	61.88	61.91	62.19	62.56	63.73	65.93	68.48	71.45	78.91	89.18	103.7	124.8	156.0	199.6	248.4	288.8
470	63.11	63.14	63.42	63.78	64.93	67.07	69.53	72.37	79.40	88.86	101.8	120.0	145.7	180.8	223.3	263.6
480	64.35	64.38	64.66	65.01	66.13	68.22	70.61	73.33	79.99	88.78	100.5	116.5	138.3	167.3	203.2	241.0
490	65.60	65.63	65.90	66.25	67.35	69.39	71.70	74.32	80.66	88.88	99.64	113.9	132.7	157.4	187.8	221.8
500	66.86	66.89	67.16	67.50	68.58	70.57	72.82	75.35	81.40	89.13	99.07	111.9	128.6	149.9	176.1	205.8
510	68.12	68.16	68.42	68.76	69.82	71.77	73.96	76.40	82.21	89.51	98.76	110.5	125.4	144.1	167.0	193.2
520	69.40	69.43	69.69	70.02	71.07	72.98	75.11	77.48	83.06	90.00	98.65	109.5	123.0	139.7	159.8	183.2
530	70.68	70.71	70.97	71.30	72.33	74.20	76.27	78.58	83.96	90.57	98.72	108.8	121.1	136.2	154.2	175.0
540	71.97	72.00	72.25	72.58	73.59	75.43	77.46	79.70	84.89	91.22	98.93	108.3	119.7	133.4	149.6	168.4
550	73.27	73.30	73.55	73.87	74.86	76.67	78.65	80.84	85.87	91.93	99.25	108.1	118.6	131.2	146.0	163.0
560	74.57	74.60	74.85	75.16	76.15	77.92	79.86	81.99	86.87	92.71	99.68	108.0	117.9	129.5	143.1	158.6
570	75.88	75.91	76.16	76.47	77.44	79.18	81.08	83.16	87.90	93.53	100.2	108.1	117.4	128.2	140.7	155.0
580	77.20	77.23	77.47	77.78	78.74	80.45	82.32	84.35	88.96	94.39	100.8	108.3	117.1	127.2	138.9	152.0
590	78.53	78.56	78.80	79.10	80.04	81.73	83.56	85.55	90.04	95.30	101.4	108.6	116.9	126.5	137.4	149.6
600	79.86	79.89	80.13	80.43	81.36	83.01	84.81	86.76	91.14	96.24	102.2	109.0	116.9	125.9	136.2	147.6
610	81.20	81.23	81.46	81.76	82.68	84.31	86.08	87.99	92.26	97.21	102.9	109.5	117.0	125.6	135.3	146.0
620	82.55	82.58	82.81	83.10	84.00	85.61	87.35	89.22	93.40	98.22	103.7	110.1	117.3	125.4	134.6	144.7
630	83.90	83.93	84.16	84.44	85.34	86.93	88.67	90.47	94.56	99.24	104.6	110.7	117.6	125.4	134.1	143.7
640	85.26	85.29	85.51	85.80	86.68	88.24	89.93	91.73	95.73	100.3	105.5	111.4	118.0	125.5	133.8	142.9
650	86.62	86.65	86.87	87.16	88.03	89.57	91.23	93.00	96.92	101.4	106.4	112.1	118.5	125.7	133.6	142.3
660	88.00	88.02	88.24	88.52	89.38	90.90	92.53	94.28	98.12	102.5	107.4	112.9	119.1	125.9	133.5	141.8
670	89.37	89.40	89.62	89.89	90.74	92.24	93.85	95.56	99.33	103.6	108.4	113.7	119.7	126.3	133.6	141.6
680	90.75	90.78	90.99	91.27	92.11	93.59	95.17	96.86	100.6	104.7	109.4	114.6	120.4	126.7	133.8	141.4
690	92.14	92.17	92.38	92.65	93.48	94.94	96.50	98.16	101.8	105.9	110.4	115.5	121.1	127.2	134.0	141.4
700	93.53	93.56	93.77	94.03	94.86	96.30	97.84	99.47	103.0	107.0	111.5	116.4	121.8	127.8	134.3	141.4

TABLE 8 THERMAL DIFFUSIVITY α IN $10^{-6}m^2/s$

t(°C) \ p(MPa) --->	0.05	0.1	0.5	1.0	2.5	5.0	7.5	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
0	0.133	0.133	0.133	0.134	0.134	0.134	0.135	0.136	0.137	0.138	0.139	0.140	0.141	0.142	0.143	0.144
10	0.139	0.139	0.139	0.139	0.139	0.140	0.140	0.141	0.142	0.143	0.144	0.144	0.145	0.146	0.147	0.148
20	0.144	0.144	0.144	0.144	0.144	0.144	0.145	0.145	0.146	0.147	0.148	0.148	0.149	0.150	0.151	0.151
30	0.148	0.148	0.148	0.148	0.148	0.149	0.149	0.149	0.150	0.151	0.152	0.152	0.153	0.154	0.154	0.155
40	0.152	0.152	0.152	0.152	0.152	0.152	0.153	0.153	0.154	0.154	0.155	0.156	0.156	0.157	0.158	0.158
50	0.155	0.155	0.155	0.155	0.155	0.156	0.156	0.156	0.157	0.158	0.158	0.159	0.160	0.160	0.161	0.162
60	0.158	0.158	0.158	0.158	0.159	0.159	0.159	0.160	0.160	0.161	0.162	0.162	0.163	0.163	0.164	0.165
70	0.161	0.161	0.161	0.161	0.161	0.162	0.162	0.162	0.163	0.164	0.164	0.165	0.166	0.166	0.167	0.167
80	0.164	0.164	0.164	0.164	0.164	0.164	0.165	0.165	0.166	0.166	0.167	0.168	0.168	0.169	0.169	0.170
90	40.06	0.166	0.166	0.166	0.166	0.166	0.167	0.167	0.168	0.169	0.169	0.170	0.170	0.171	0.172	0.172
100	42.68	20.74	0.168	0.168	0.168	0.168	0.169	0.169	0.170	0.171	0.171	0.172	0.173	0.173	0.174	0.174
110	45.39	22.09	0.169	0.170	0.170	0.170	0.170	0.171	0.172	0.172	0.173	0.174	0.174	0.175	0.176	0.176
120	48.21	23.50	0.171	0.171	0.171	0.171	0.172	0.172	0.173	0.174	0.175	0.175	0.176	0.177	0.177	0.178
130	51.12	24.97	0.172	0.172	0.172	0.173	0.173	0.173	0.174	0.175	0.176	0.176	0.177	0.178	0.179	0.179
140	54.12	26.50	0.173	0.173	0.173	0.173	0.174	0.174	0.175	0.176	0.177	0.177	0.178	0.179	0.180	0.180
150	57.21	28.07	0.173	0.173	0.173	0.174	0.174	0.175	0.176	0.177	0.177	0.178	0.179	0.180	0.181	0.181
160	60.40	29.69	5.259	0.173	0.174	0.174	0.175	0.175	0.176	0.177	0.178	0.179	0.180	0.180	0.181	0.182
170	63.67	31.36	5.605	0.173	0.173	0.174	0.174	0.175	0.176	0.177	0.178	0.179	0.180	0.181	0.182	0.183
180	67.04	33.07	5.967	2.653	0.173	0.174	0.174	0.175	0.176	0.177	0.178	0.179	0.180	0.181	0.182	0.183
190	70.50	34.83	6.344	2.838	0.172	0.173	0.173	0.174	0.175	0.176	0.178	0.179	0.180	0.181	0.182	0.183
200	74.04	36.63	6.732	3.035	0.171	0.172	0.172	0.173	0.174	0.176	0.177	0.178	0.179	0.180	0.182	0.183
210	77.68	38.47	7.132	3.242	0.169	0.170	0.171	0.172	0.173	0.175	0.176	0.177	0.179	0.180	0.181	0.182
220	81.41	40.36	7.541	3.457	0.167	0.168	0.169	0.170	0.172	0.173	0.175	0.176	0.178	0.179	0.180	0.181
230	85.23	42.29	7.959	3.678	1.153	0.166	0.167	0.168	0.170	0.171	0.173	0.175	0.176	0.178	0.179	0.180
240	89.14	44.27	8.385	3.905	1.246	0.163	0.164	0.165	0.167	0.169	0.171	0.173	0.175	0.176	0.178	0.179
250	93.14	46.29	8.819	4.137	1.345	0.159	0.161	0.162	0.165	0.167	0.169	0.171	0.173	0.174	0.176	0.178
260	97.24	48.36	9.261	4.373	1.448	0.155	0.157	0.158	0.161	0.164	0.166	0.168	0.170	0.172	0.174	0.176
270	101.4	50.47	9.710	4.613	1.555	0.561	0.152	0.154	0.157	0.160	0.163	0.165	0.168	0.170	0.172	0.174
280	105.7	52.63	10.17	4.855	1.665	0.620	0.147	0.149	0.153	0.156	0.159	0.162	0.165	0.167	0.169	0.171
290	110.1	54.83	10.63	5.101	1.777	0.680	0.140	0.142	0.147	0.151	0.155	0.158	0.161	0.164	0.166	0.169
300	114.6	57.08	11.10	5.350	1.890	0.743	0.365	0.135	0.140	0.145	0.150	0.154	0.157	0.160	0.163	0.166
310	119.1	59.38	11.58	5.602	2.005	0.807	0.413	0.125	0.133	0.139	0.144	0.148	0.152	0.156	0.159	0.162
320	123.8	61.72	12.07	5.857	2.120	0.872	0.462	0.253	0.123	0.131	0.137	0.142	0.147	0.151	0.155	0.158
330	128.5	64.11	12.56	6.115	2.237	0.938	0.511	0.295	0.110	0.121	0.129	0.135	0.141	0.146	0.150	0.154
340	133.4	66.54	13.06	6.376	2.354	1.005	0.560	0.337	0.093	0.109	0.119	0.127	0.134	0.139	0.144	0.149
350	138.3	69.02	13.57	6.641	2.471	1.072	0.609	0.379	0.140	0.093	0.108	0.118	0.126	0.132	0.138	0.143

TABLE 8 THERMAL DIFFUSIVITY α IN $10^{-6}m^2/s$

	p(MPa) --->															
t(°C)	0.05	0.1	0.5	1.0	2.5	5.0	7.5	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
360	143.4	71.54	14.09	6.908	2.589	1.139	0.657	0.419	0.176	0.068	0.095	0.107	0.117	0.125	0.132	0.137
370	143.5	74.12	14.62	7.179	2.707	1.205	0.764	0.456	0.207	0.067	0.073	0.095	0.108	0.118	0.127	0.134
380	153.7	76.74	15.15	7.453	2.827	1.273	0.753	0.496	0.237	0.105	0.034	0.076	0.094	0.106	0.116	0.124
390	155.0	79.40	15.70	7.731	2.947	1.341	0.803	0.536	0.269	0.131	0.036	0.053	0.081	0.097	0.108	0.117
400	164.5	82.12	16.25	8.013	3.068	1.409	0.853	0.576	0.300	0.159	0.071	0.038	0.065	0.085	0.099	0.109
410	170.0	84.88	16.81	8.298	3.189	1.477	0.902	0.615	0.331	0.187	0.101	0.046	0.053	0.073	0.090	0.102
420	175.6	87.69	17.38	8.588	3.312	1.545	0.952	0.655	0.361	0.214	0.125	0.067	0.053	0.065	0.081	0.095
430	181.3	90.54	17.95	8.881	3.435	1.613	1.001	0.694	0.391	0.240	0.149	0.094	0.061	0.064	0.075	0.088
440	187.1	93.44	18.54	9.178	3.560	1.681	1.050	0.734	0.420	0.265	0.172	0.114	0.076	0.068	0.074	0.084
450	193.0	96.39	19.14	9.479	3.685	1.749	1.100	0.773	0.449	0.290	0.195	0.134	0.096	0.076	0.077	0.083
460	198.9	99.38	19.74	9.785	3.812	1.817	1.149	0.913	0.478	0.313	0.216	0.153	0.113	0.087	0.082	0.085
470	205.0	102.4	20.35	10.09	3.940	1.886	1.198	0.952	0.507	0.337	0.237	0.173	0.130	0.102	0.090	0.089
480	211.2	105.5	20.97	10.41	4.069	1.954	1.247	0.891	0.536	0.360	0.258	0.191	0.146	0.117	0.098	0.095
490	217.5	108.7	21.61	10.73	4.200	2.023	1.296	0.930	0.564	0.384	0.278	0.209	0.163	0.132	0.112	0.098
500	223.8	111.8	22.25	11.05	4.332	2.093	1.345	0.969	0.593	0.407	0.297	0.227	0.179	0.146	0.125	0.111
510	230.3	115.1	22.90	11.38	4.465	2.162	1.394	1.008	0.622	0.430	0.317	0.244	0.194	0.160	0.137	0.122
520	236.8	118.3	23.55	11.71	4.601	2.233	1.443	1.047	0.650	0.453	0.336	0.261	0.210	0.174	0.149	0.133
530	243.5	121.7	24.22	12.04	4.737	2.304	1.492	1.086	0.679	0.476	0.356	0.278	0.225	0.187	0.161	0.143
540	250.2	125.0	24.90	12.38	4.876	2.375	1.542	1.124	0.707	0.499	0.375	0.295	0.240	0.201	0.173	0.153
550	257.0	128.4	25.58	12.73	5.016	2.447	1.591	1.163	0.735	0.521	0.395	0.312	0.255	0.215	0.185	0.164
560	264.0	131.9	26.28	13.08	5.157	2.520	1.641	1.202	0.763	0.544	0.414	0.329	0.271	0.228	0.197	0.175
570	271.0	135.4	26.98	13.43	5.300	2.593	1.692	1.241	0.791	0.567	0.433	0.346	0.286	0.242	0.210	0.186
580	278.1	139.0	27.70	13.79	5.445	2.667	1.742	1.280	0.819	0.589	0.452	0.363	0.301	0.256	0.222	0.197
590	285.3	142.6	28.42	14.15	5.592	2.742	1.794	1.320	0.847	0.611	0.471	0.380	0.316	0.269	0.235	0.208
600	292.6	146.2	29.15	14.52	5.740	2.818	1.845	1.360	0.875	0.634	0.490	0.396	0.331	0.283	0.247	0.220
610	299.9	149.9	29.89	14.89	5.891	2.894	1.897	1.399	0.903	0.656	0.509	0.413	0.345	0.296	0.260	0.232
620	307.4	153.7	30.64	15.27	6.042	2.971	1.949	1.440	0.931	0.678	0.528	0.429	0.360	0.310	0.272	0.243
630	315.0	157.4	31.40	15.65	6.196	3.049	2.002	1.480	0.959	0.701	0.547	0.445	0.375	0.323	0.284	0.254
640	322.6	161.3	32.17	16.03	6.352	3.128	2.056	1.521	0.988	0.723	0.565	0.462	0.389	0.336	0.296	0.266
650	330.4	165.1	32.94	16.42	6.509	3.208	2.110	1.562	1.016	0.745	0.584	0.478	0.403	0.349	0.308	0.277
660	338.2	169.1	33.73	16.82	6.668	3.288	2.164	1.603	1.045	0.767	0.602	0.494	0.418	0.362	0.320	0.288
670	346.2	173.0	34.53	17.21	6.828	3.370	2.219	1.645	1.074	0.790	0.621	0.510	0.432	0.375	0.332	0.299
680	354.2	177.0	35.33	17.62	6.991	3.452	2.275	1.688	1.103	0.812	0.640	0.526	0.446	0.388	0.344	0.309
690	362.3	181.1	36.14	18.02	7.155	3.535	2.331	1.730	1.132	0.835	0.658	0.542	0.460	0.400	0.355	0.320
700	370.5	185.2	36.97	18.44	7.322	3.619	2.388	1.773	1.161	0.858	0.677	0.558	0.475	0.413	0.367	0.331

TABLE 9 PRANDTL NUMBER, *Pr*

t(°C) ↓ / p(MPa) --->	0.05	0.1	0.5	1.0	2.5	5.0	7.5	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
0	13.45	13.45	13.43	13.40	13.33	13.21	13.10	12.98	12.77	12.56	12.36	12.17	11.99	11.82	11.66	11.50
10	9.420	9.419	9.409	9.396	9.359	9.298	9.238	9.180	9.068	8.960	8.858	8.760	8.667	8.578	8.493	8.412
20	6.993	6.993	6.987	6.980	6.959	6.924	6.890	6.857	6.792	6.731	6.672	6.616	6.563	6.512	6.463	6.416
30	5.420	5.419	5.416	5.412	5.398	5.377	5.356	5.336	5.296	5.258	5.222	5.187	5.154	5.122	5.092	5.063
40	4.342	4.342	4.339	4.336	4.328	4.314	4.300	4.287	4.261	4.236	4.213	4.190	4.168	4.147	4.128	4.109
50	3.572	3.571	3.570	3.568	3.562	3.553	3.543	3.534	3.517	3.500	3.484	3.468	3.454	3.440	3.426	3.413
60	3.002	3.002	3.001	3.000	2.996	2.989	2.983	2.976	2.964	2.953	2.941	2.931	2.920	2.911	2.901	2.892
70	2.570	2.570	2.569	2.568	2.565	2.561	2.556	2.552	2.543	2.535	2.527	2.519	2.512	2.505	2.499	2.493
80	2.234	2.234	2.233	2.233	2.231	2.227	2.224	2.221	2.215	2.209	2.204	2.198	2.193	2.189	2.184	2.180
90	0.991	1.969	1.968	1.968	1.966	1.964	1.962	1.959	1.955	1.951	1.947	1.943	1.940	1.936	1.933	1.930
100	0.986	1.004	1.756	1.755	1.754	1.752	1.751	1.749	1.746	1.743	1.740	1.737	1.735	1.732	1.730	1.728
110	0.982	0.999	1.583	1.583	1.582	1.581	1.579	1.578	1.575	1.573	1.571	1.569	1.567	1.566	1.564	1.563
120	0.977	0.994	1.441	1.441	1.441	1.439	1.438	1.437	1.436	1.434	1.432	1.431	1.429	1.428	1.427	1.426
130	0.973	0.989	1.325	1.324	1.324	1.323	1.322	1.321	1.320	1.318	1.317	1.316	1.315	1.314	1.313	1.312
140	0.969	0.983	1.228	1.227	1.227	1.226	1.225	1.225	1.223	1.222	1.221	1.220	1.219	1.218	1.218	1.217
150	0.966	0.979	1.147	1.147	1.146	1.145	1.145	1.144	1.142	1.141	1.140	1.139	1.138	1.138	1.137	1.137
160	0.963	0.974	1.051	1.079	1.079	1.078	1.077	1.076	1.075	1.073	1.072	1.071	1.071	1.070	1.069	1.069
170	0.960	0.970	1.043	1.023	1.022	1.021	1.020	1.019	1.018	1.016	1.015	1.014	1.013	1.012	1.012	1.011
180	0.957	0.966	1.033	1.104	0.975	0.974	0.973	0.972	0.970	0.969	0.967	0.966	0.965	0.964	0.963	0.962
190	0.955	0.963	1.024	1.094	0.937	0.935	0.934	0.933	0.931	0.929	0.927	0.925	0.924	0.923	0.922	0.921
200	0.953	0.960	1.014	1.081	0.905	0.903	0.902	0.900	0.898	0.895	0.893	0.891	0.890	0.888	0.887	0.886
210	0.951	0.957	1.006	1.067	0.880	0.878	0.876	0.874	0.871	0.868	0.866	0.863	0.861	0.860	0.858	0.856
220	0.949	0.954	0.997	1.054	0.860	0.858	0.856	0.854	0.850	0.846	0.843	0.840	0.838	0.836	0.834	0.832
230	0.947	0.952	0.990	1.040	1.198	0.844	0.841	0.838	0.834	0.829	0.826	0.822	0.819	0.817	0.814	0.812
240	0.945	0.949	0.983	1.028	1.176	0.835	0.831	0.828	0.822	0.817	0.812	0.808	0.805	0.801	0.798	0.796
250	0.943	0.947	0.977	1.017	1.153	0.831	0.827	0.823	0.815	0.809	0.803	0.798	0.794	0.790	0.786	0.783
260	0.942	0.945	0.971	1.006	1.130	0.834	0.828	0.823	0.813	0.805	0.798	0.792	0.787	0.782	0.778	0.774
270	0.940	0.943	0.966	0.997	1.107	1.331	0.836	0.829	0.817	0.806	0.797	0.790	0.783	0.777	0.772	0.767
280	0.939	0.941	0.961	0.988	1.086	1.289	0.851	0.841	0.825	0.812	0.801	0.791	0.783	0.776	0.770	0.764
290	0.937	0.940	0.957	0.981	1.067	1.248	0.876	0.863	0.841	0.824	0.809	0.797	0.787	0.778	0.770	0.763
300	0.936	0.938	0.953	0.974	1.050	1.211	1.444	0.897	0.866	0.843	0.824	0.808	0.795	0.784	0.774	0.766
310	0.935	0.936	0.950	0.968	1.034	1.177	1.372	0.950	0.904	0.871	0.845	0.825	0.808	0.794	0.782	0.771
320	0.933	0.935	0.947	0.962	1.020	1.147	1.310	1.582	0.962	0.912	0.876	0.849	0.827	0.809	0.794	0.781
330	0.932	0.933	0.944	0.958	1.008	1.119	1.259	1.469	1.055	0.973	0.920	0.882	0.853	0.830	0.810	0.794
340	0.931	0.932	0.941	0.953	0.997	1.095	1.215	1.382	1.233	1.068	0.983	0.928	0.889	0.858	0.834	0.813
350	0.930	0.930	0.939	0.949	0.988	1.074	1.178	1.313	1.879	1.236	1.077	0.993	0.938	0.897	0.865	0.839

TABLE 9 PRANDTL NUMBER, *Pr*

t(°C) \ *p*(MPa) --->	0.05	0.1	0.5	1.0	2.5	5.0	7.5	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0
360	0.928	0.929	0.936	0.946	0.981	1.055	1.147	1.259	1.662	1.675	1.209	1.086	1.003	0.944	0.900	0.866
370	0.927	0.928	0.934	0.942	0.972	1.040	1.123	1.222	1.542	2.680	1.579	1.217	1.079	0.991	0.928	0.883
380	0.926	0.926	0.932	0.939	0.966	1.025	1.099	1.186	1.451	2.021	3.397	1.526	1.239	1.099	1.010	0.953
390	0.924	0.925	0.930	0.937	0.960	1.011	1.076	1.152	1.365	1.804	4.067	2.194	1.443	1.205	1.083	1.007
400	0.923	0.924	0.928	0.934	0.955	1.000	1.057	1.123	1.298	1.626	2.450	3.258	1.817	1.375	1.183	1.073
410	0.922	0.922	0.927	0.932	0.950	0.989	1.040	1.099	1.246	1.493	1.930	3.023	2.275	1.611	1.313	1.155
420	0.921	0.921	0.925	0.930	0.946	0.961	1.025	1.078	1.204	1.394	1.713	2.366	2.446	1.855	1.470	1.254
430	0.91	0.920	0.923	0.928	0.942	0.973	1.012	1.059	1.169	1.320	1.558	1.886	2.312	1.974	1.616	1.361
440	0.918	0.919	0.922	0.926	0.939	0.966	1.001	1.042	1.139	1.264	1.445	1.693	2.044	1.972	1.699	1.457
450	0.917	0.917	0.920	0.924	0.936	0.960	0.991	1.028	1.114	1.219	1.361	1.551	1.763	1.890	1.714	1.515
460	0.916	0.916	0.919	0.922	0.933	0.955	0.982	1.015	1.092	1.182	1.297	1.444	1.611	1.772	1.688	1.534
470	0.914	0.915	0.917	0.920	0.930	0.950	0.974	1.003	1.072	1.152	1.247	1.364	1.495	1.620	1.633	1.527
480	0.913	0.913	0.916	0.919	0.928	0.946	0.967	0.993	1.055	1.126	1.207	1.302	1.407	1.505	1.589	1.505
490	0.912	0.912	0.914	0.917	0.926	0.942	0.961	0.984	1.040	1.103	1.174	1.253	1.339	1.419	1.479	1.531
500	0.911	0.911	0.913	0.916	0.924	0.938	0.956	0.977	1.026	1.083	1.145	1.213	1.285	1.352	1.400	1.429
510	0.909	0.910	0.912	0.914	0.922	0.935	0.951	0.970	1.014	1.066	1.121	1.180	1.242	1.300	1.341	1.359
520	0.908	0.908	0.910	0.913	0.920	0.933	0.947	0.964	1.004	1.050	1.100	1.152	1.205	1.256	1.295	1.311
530	0.907	0.907	0.909	0.911	0.918	0.930	0.943	0.958	0.994	1.036	1.081	1.127	1.174	1.219	1.256	1.274
540	0.906	0.906	0.908	0.910	0.916	0.927	0.940	0.953	0.986	1.023	1.064	1.105	1.147	1.187	1.222	1.242
550	0.904	0.905	0.906	0.908	0.915	0.925	0.937	0.949	0.978	1.012	1.049	1.086	1.123	1.159	1.191	1.213
560	0.903	0.903	0.905	0.907	0.913	0.923	0.934	0.945	0.972	1.002	1.035	1.069	1.102	1.134	1.163	1.186
570	0.902	0.902	0.904	0.906	0.911	0.921	0.931	0.942	0.966	0.993	1.023	1.053	1.083	1.111	1.137	1.159
580	0.901	0.901	0.902	0.904	0.910	0.919	0.928	0.938	0.960	0.985	1.012	1.039	1.066	1.091	1.114	1.135
590	0.899	0.900	0.901	0.903	0.908	0.917	0.926	0.935	0.956	0.978	1.003	1.027	1.051	1.073	1.094	1.112
600	0.898	0.898	0.900	0.902	0.907	0.915	0.924	0.933	0.951	0.972	0.994	1.016	1.037	1.057	1.075	1.091
610	0.897	0.897	0.899	0.900	0.905	0.914	0.922	0.930	0.947	0.966	0.986	1.006	1.025	1.043	1.058	1.072
620	0.896	0.896	0.897	0.899	0.904	0.912	0.920	0.928	0.944	0.961	0.979	0.997	1.015	1.030	1.044	1.055
630	0.895	0.895	0.896	0.898	0.902	0.910	0.918	0.925	0.941	0.957	0.973	0.990	1.005	1.019	1.031	1.041
640	0.893	0.893	0.895	0.896	0.901	0.909	0.916	0.923	0.937	0.952	0.968	0.983	0.996	1.009	1.019	1.027
650	0.892	0.892	0.893	0.895	0.900	0.907	0.914	0.921	0.935	0.949	0.963	0.976	0.989	1.000	1.009	1.016
660	0.891	0.891	0.892	0.894	0.898	0.905	0.912	0.919	0.932	0.945	0.958	0.970	0.982	0.992	1.000	1.006
670	0.890	0.890	0.891	0.892	0.897	0.904	0.910	0.917	0.929	0.942	0.954	0.965	0.976	0.985	0.992	0.997
680	0.888	0.889	0.890	0.891	0.895	0.902	0.909	0.915	0.927	0.938	0.950	0.960	0.970	0.978	0.984	0.989
690	0.887	0.887	0.888	0.890	0.894	0.901	0.907	0.913	0.924	0.936	0.946	0.956	0.965	0.972	0.978	0.982
700	0.886	0.886	0.887	0.889	0.893	0.899	0.905	0.911	0.922	0.933	0.943	0.952	0.960	0.967	0.972	0.975

TABLE 10 TRANSPORT PROPERTIES ON THE SATURATION LINE

t °C	p MPa	C_p' kJ/(kg K)	C_p'' kJ/(kg K)	μ' 10^{-6}Pa.s	μ'' 10^{-6}Pa.s	λ' 10^{-3}W/(m.K)	λ'' 10^{-3}W/(m.K)	Pr'	Pr''	ν' $10^{-6}m^2/s$	ν'' $10^{-6}m^2/s$	α' $10^{-6}m^2/s$	α'' $10^{-6}m^2/s$
0	0.0006108	4.217	1.854	1792.1	9.216	561.9	16.49	13.45	1.036	1.792	1901.3	0.1333	1834.9
5	0.0008718	4.203	1.857	1519.9	9.336	572.3	16.85	11.16	1.029	1.520	1373.9	0.1362	1335.6
10	0.001227	4.193	1.860	1307.8	9.461	582.0	17.21	9.421	1.022	1.308	1007.0	0.1388	985.2
15	0.001704	4.186	1.863	1139.1	9.592	591.1	17.58	8.068	1.016	1.140	748.0	0.1413	736.0
20	0.002337	4.182	1.866	1002.7	9.727	599.6	17.95	6.994	1.011	1.004	562.6	0.1436	556.3
25	0.003166	4.180	1.870	890.8	9.867	607.6	18.33	6.128	1.007	0.8934	428.2	0.1458	425.3
30	0.004241	4.179	1.875	797.8	10.01	615.0	18.70	5.420	1.003	0.8012	329.6	0.1478	328.6
35	0.005622	4.178	1.880	719.6	10.16	622.0	19.09	4.834	1.000	0.7239	256.4	0.1498	256.4
40	0.007375	4.179	1.885	653.2	10.31	628.6	19.48	4.342	0.9976	0.6583	201.5	0.1516	202.0
45	0.009582	4.180	1.892	596.3	10.46	634.7	19.87	3.926	0.9956	0.6021	159.8	0.1534	160.5
50	0.01234	4.181	1.899	547.1	10.62	640.5	20.28	3.572	0.9941	0.5537	127.9	0.1550	128.6
55	0.01574	4.183	1.907	504.3	10.78	645.8	20.69	3.267	0.9931	0.5116	103.2	0.1566	103.9
60	0.01992	4.185	1.915	466.8	10.94	650.7	21.10	3.002	0.9926	0.4748	83.97	0.1582	84.59
65	0.02501	4.187	1.925	433.8	11.10	655.2	21.53	2.772	0.9926	0.4424	68.83	0.1596	69.35
70	0.03116	4.190	1.936	404.5	11.26	659.4	21.96	2.570	0.9930	0.4137	56.83	0.1610	57.23
75	0.03855	4.193	1.948	378.3	11.43	663.3	22.40	2.392	0.9939	0.3882	47.25	0.1623	47.54
80	0.04736	4.196	1.962	355.0	11.60	666.8	22.86	2.234	0.9951	0.3653	39.53	0.1635	39.72
85	0.05780	4.200	1.976	333.9	11.76	669.9	23.32	2.094	0.9968	0.3448	33.28	0.1647	33.38
90	0.07011	4.205	1.992	315.0	11.93	672.7	23.80	1.969	0.9989	0.3264	28.18	0.1658	28.21
95	0.08453	4.210	2.009	297.8	12.10	675.3	24.29	1.857	1.001	0.3097	23.99	0.1668	23.96
100	0.1013	4.216	2.028	282.2	12.28	677.5	24.79	1.756	1.004	0.2945	20.54	0.1677	20.45
105	0.1208	4.222	2.048	267.9	12.45	679.3	25.31	1.665	1.007	0.2807	17.67	0.1686	17.54
110	0.1433	4.229	2.070	254.9	12.62	680.9	25.84	1.583	1.011	0.2682	15.27	0.1694	15.10
115	0.1691	4.236	2.094	243.0	12.79	682.2	26.39	1.509	1.015	0.2567	13.26	0.1701	13.06
120	0.1985	4.245	2.120	232.1	12.97	683.3	26.96	1.442	1.020	0.2461	11.56	0.1707	11.34
125	0.2321	4.254	2.147	222.0	13.14	684.0	27.55	1.380	1.024	0.2365	10.12	0.1713	9.883
130	0.2701	4.263	2.176	212.7	13.32	684.4	28.15	1.325	1.030	0.2276	8.898	0.1718	8.643
135	0.3131	4.274	2.207	204.1	13.49	684.6	28.77	1.274	1.035	0.2194	7.850	0.1722	7.584
140	0.3614	4.285	2.241	196.1	13.67	684.5	29.42	1.228	1.041	0.2118	6.950	0.1725	6.676
145	0.4155	4.297	2.276	188.7	13.84	684.2	30.09	1.185	1.047	0.2049	6.174	0.1728	5.894
150	0.4760	4.310	2.314	181.9	14.02	683.6	30.77	1.147	1.054	0.1984	5.502	0.1730	5.218
155	0.5433	4.324	2.355	175.5	14.19	682.7	31.49	1.112	1.062	0.1924	4.917	0.1731	4.632
160	0.6181	4.339	2.397	169.5	14.37	681.5	32.22	1.079	1.069	0.1869	4.408	0.1732	4.123
165	0.7008	4.354	2.443	164.0	14.55	680.1	32.98	1.050	1.077	0.1817	3.962	0.1731	3.678
170	0.7920	4.371	2.491	158.8	14.72	678.5	33.77	1.023	1.086	0.1770	3.571	0.1730	3.288
175	0.8924	4.389	2.542	153.9	14.90	676.6	34.58	0.9984	1.095	0.1725	3.226	0.1728	2.946
180	1.003	4.408	2.596	149.3	15.07	674.5	35.42	0.9760	1.104	0.1684	2.921	0.1725	2.645
185	1.123	4.428	2.653	145.1	15.25	672.1	36.32	0.9557	1.114	0.1645	2.651	0.1722	2.379

TABLE 10 TRANSPORT PROPERTIES ON THE SATURATION LINE

t °C	p MPa	C_p' kJ/(kg K)	C_p'' kJ/(kg K)	μ' 10^{-6}Pa.s	μ'' 10^{-6}Pa.s	λ' 10^{-3}W/(m.K)	λ'' 10^{-3}W/(m.K)	Pr'	Pr''	ν' $10^{-6}m^2/s$	ν'' $10^{-6}m^2/s$	α' $10^{-6}m^2/s$	α'' $10^{-6}m^2/s$
190	1.255	4.449	2.713	141.0	15.42	669.4	37.20	0.9372	1.125	0.1610	2.411	0.1717	2.143
195	1.399	4.472	2.776	137.2	15.60	666.5	38.13	0.9206	1.136	0.1576	2.197	0.1712	1.935
200	1.555	4.497	2.843	133.6	15.78	663.4	39.10	0.9056	1.147	0.1545	2.006	0.1706	1.749
205	1.724	4.523	2.913	130.2	15.95	660.0	40.10	0.8921	1.159	0.1516	1.835	0.1699	1.583
210	1.908	4.551	2.988	127.0	16.13	656.3	41.14	0.8802	1.172	0.1489	1.682	0.1691	1.435
215	2.106	4.581	3.067	123.9	16.31	652.5	42.23	0.8698	1.185	0.1463	1.543	0.1682	1.303
220	2.320	4.613	3.150	121.0	16.49	648.3	43.35	0.8607	1.198	0.1439	1.419	0.1672	1.184
225	2.550	4.648	3.238	118.2	16.67	643.9	44.52	0.8529	1.212	0.1417	1.306	0.1661	1.077
230	2.798	4.685	3.331	115.5	16.85	639.3	45.74	0.8464	1.227	0.1396	1.204	0.1649	0.9811
235	3.063	4.725	3.430	112.9	17.03	634.4	47.01	0.8413	1.243	0.1376	1.111	0.1636	0.8941
240	3.348	4.769	3.536	110.5	17.22	629.2	48.34	0.8373	1.260	0.1358	1.027	0.1622	0.8154
245	3.652	4.816	3.650	108.1	17.40	623.8	49.72	0.8347	1.278	0.1341	0.9504	0.1606	0.7439
250	3.978	4.867	3.772	105.8	17.59	618.1	51.18	0.8333	1.297	0.1324	0.8803	0.1589	0.6789
255	4.325	4.922	3.904	103.6	17.78	612.1	52.71	0.8333	1.317	0.1309	0.8162	0.1571	0.6197
260	4.694	4.983	4.047	101.5	17.98	605.9	54.33	0.8346	1.339	0.1295	0.7575	0.1551	0.5656
265	5.088	5.049	4.203	99.40	18.18	599.4	56.03	0.8373	1.363	0.1281	0.7036	0.1530	0.5161
270	5.506	5.122	4.373	97.36	18.38	592.6	57.84	0.8415	1.390	0.1268	0.6541	0.1507	0.4707
275	5.950	5.202	4.561	95.37	18.59	585.4	59.77	0.8474	1.418	0.1256	0.6084	0.1482	0.4290
280	6.420	5.290	4.767	93.41	18.80	578.0	61.82	0.8550	1.450	0.1245	0.5664	0.1456	0.3907
285	6.919	5.389	4.997	91.49	19.02	570.3	64.03	0.8645	1.484	0.1234	0.5275	0.1427	0.3554
290	7.446	5.499	5.253	89.58	19.25	562.2	66.40	0.8762	1.523	0.1224	0.4915	0.1397	0.3228
295	8.004	5.622	5.540	87.69	19.49	553.8	68.98	0.8903	1.565	0.1214	0.4582	0.1364	0.2928
300	8.593	5.762	5.863	85.82	19.74	545.0	71.78	0.9072	1.612	0.1205	0.4273	0.1328	0.2650
305	9.214	5.921	6.230	83.94	20.00	535.9	74.86	0.9275	1.664	0.1196	0.3985	0.1290	0.2394
310	9.870	6.104	6.650	82.07	20.28	526.4	78.26	0.9516	1.723	0.1188	0.3717	0.1249	0.2158
315	10.56	6.316	7.139	80.18	20.57	516.5	82.06	0.9804	1.790	0.1181	0.3468	0.1204	0.1938
320	11.29	6.565	7.722	78.27	20.89	506.3	86.34	1.015	1.868	0.1174	0.3234	0.1156	0.1731
325	12.06	6.861	8.440	76.34	21.24	495.6	91.24	1.057	1.965	0.1167	0.3015	0.1104	0.1534
330	12.86	7.219	9.361	74.36	21.62	484.5	96.93	1.108	2.088	0.1161	0.2808	0.1048	0.1345
335	13.71	7.664	10.58	72.33	22.04	473.0	103.7	1.172	2.250	0.1156	0.2613	0.09861	0.1162
340	14.61	8.233	12.21	70.23	22.52	461.1	111.8	1.254	2.460	0.1151	0.2428	0.09178	0.09870
345	15.55	8.997	14.38	68.02	23.08	448.8	121.8	1.364	2.723	0.1147	0.2253	0.08410	0.08275
350	16.54	10.10	17.15	65.66	23.73	436.3	134.6	1.521	3.024	0.1143	0.2088	0.07517	0.06905
355	17.58	12.06	19.70	63.08	24.53	423.7	151.9	1.795	3.183	0.1141	0.1928	0.06354	0.06058
360	18.68	14.58	25.12	60.11	25.56	411.8	176.8	2.128	3.631	0.1140	0.1774	0.05356	0.04885
365	19.83	20.57	36.68	56.58	26.97	404.1	217.3	2.881	4.542	0.1141	0.1621	0.03959	0.03670
370	21.05	43.17	76.91	51.82	29.31	416.4	306.4	5.372	7.358	0.1147	0.1458	0.02135	0.01981

TABLE 11 SURFACE TENSION AND LAPLACE COEFFICIENT

t °C	σ 10^{-3}N/m	a mm
0	75.65	2.778
5	74.95	2.765
10	74.22	2.752
15	73.49	2.739
20	72.74	2.726
25	71.98	2.713
30	71.20	2.700
35	70.41	2.687
40	69.60	2.675
45	68.78	2.661
50	67.95	2.648
55	67.10	2.635
60	66.24	2.621
65	65.37	2.608
70	64.49	2.594
75	63.59	2.580
80	62.68	2.565
85	61.76	2.550
90	60.82	2.536
95	59.88	2.520
100	58.92	2.505
105	57.95	2.489
110	56.97	2.473
115	55.98	2.457
120	54.97	2.440
125	53.96	2.423
130	52.94	2.405
135	51.91	2.388
140	50.86	2.369
145	49.81	2.351
150	48.75	2.332
155	47.68	2.312
160	46.60	2.293
165	45.51	2.272
170	44.41	2.252
175	43.31	2.231
180	42.20	2.209

TABLE 11 SURFACE TENSION AND LAPLACE COEFFICIENT

t °C	σ 10^{-3}N/m	α mm
185	41.08	2.187
190	39.95	2.164
195	38.82	2.141
200	37.68	2.118
205	36.54	2.094
210	35.39	2.069
215	34.24	2.043
220	33.08	2.017
225	31.91	1.991
230	30.75	1.963
235	29.58	1.935
240	28.40	1.907
245	27.23	1.877
250	26.05	1.846
255	24.88	1.815
260	23.70	1.783
265	22.52	1.750
270	21.35	1.716
275	20.17	1.680
280	19.00	1.644
285	17.84	1.606
290	16.68	1.567
295	15.52	1.526
300	14.37	1.483
305	13.23	1.439
310	12.10	1.393
315	10.98	1.344
320	9.88	1.293
325	8.79	1.239
330	7.71	1.182
335	6.66	1.120
340	5.64	1.054
345	4.64	.982
350	3.68	.902
355	2.75	.812
360	1.89	.708
365	1.09	.580
370	.39	.401

TABLE 12 INTERNATIONAL SKELETON TABLES (1963, 1975 AND 1977)

Table 12A International Skeleton Tables (1963)—Thermodynamic Properties of Saturated Water and Saturated Steam

(1)

	Temperature °C	Pressure bar		Specific Volume cm³/g				Specific Enthalpy J/g			
				Water		Steam		Water		Steam	
			Tolerance		Tolerance		Tolerance		Tolerance		Tolerance
(2)	0	0.006 108	0.000 006	1.000 21	0.000 05	206 288	210	−0.041 6	0.000 4	2 501	3
	0.01	0.006 112	0.000 006	1.000 21	0.000 05	206 146	210	0.000 611	0.000 001	2 501	3
	10	0.012 271	0.000 010	1.000 4	0.000 1	106 422	110	41.99	0.04	2 519	3
	20	0.023 368	0.000 020	1.001 8	0.000 1	57 836	58	83.86	0.08	2 538	2
	30	0.042 418	0.000 030	1.004 4	0.000 1	32 929	33	125.66	0.08	2 556	2
	40	0.073 750	0.000 038	1.007 9	0.000 1	19 546	19	167.47	0.08	2 574	2
	50	0.123 35	0.000 06	1.012 1	0.000 2	12 045	12	209.3	0.1	2 592	2
	60	0.199 19	0.000 10	1.017 1	0.000 2	7 677.6	7.7	251.1	0.1	2 609	2
	70	0.311 61	0.000 16	1.022 8	0.000 2	5 045.3	5.0	293.0	0.1	2 626	2
	80	0.473 58	0.000 24	1.029 0	0.000 3	3 408.3	3.4	334.9	0.2	2 643	2
	90	0.701 09	0.000 36	1.035 9	0.000 3	2 360.9	2.4	376.9	0.2	2 660	2
(3)	100	1.013 25		1.043 5	0.000 3	1 673.0	1.7	419.1	0.2	2 676	2
	110	1.432 7	0.001 0	1.051 5	0.000 4	1 210.1	1.2	461.3	0.2	2 691	2
	120	1.985 4	0.001 3	1.060 3	0.000 4	891.71	0.89	503.7	0.2	2 706	2
	130	2.701 1	0.001 6	1.069 7	0.000 4	668.32	0.67	546.3	0.3	2 720	2
	140	3.613 6	0.002 1	1.079 8	0.000 4	508.66	0.51	589.1	0.3	2 734	2
	150	4.759 7	0.003 2	1.090 6	0.000 4	392.57	0.39	632.2	0.3	2 747	3
	160	6.180 4	0.004 2	1.102 1	0.000 4	306.85	0.31	675.5	0.3	2 758	3
	170	7.920 2	0.005 3	1.114 4	0.000 4	242.62	0.24	719.1	0.4	2 769	3
	180	10.027	0.007	1.127 5	0.000 4	193.85	0.19	763.1	0.4	2 778	4
	190	12.553	0.008	1.141 5	0.000 4	156.35	0.16	807.5	0.4	2 786	4
	200	15.550	0.008	1.156 5	0.000 4	127.19	0.13	852.4	0.4	2 793	4
	210	19.080	0.008	1.172 6	0.000 4	104.265	0.104	897.7	0.4	2 798	4
	220	23.202	0.009	1.190 0	0.000 4	86.062	0.086	943.7	0.4	2 802	4
	230	27.979	0.010	1.208 7	0.000 4	71.472	0.071	990.3	0.5	2 803	4
	240	33.480	0.012	1.229 1	0.000 4	59.674	0.060	1 037.6	0.5	2 803	4
	250	39.776	0.013	1.251 2	0.000 4	50.056	0.050	1 085.8	0.5	2 801	4
	260	46.941	0.015	1.275 5	0.000 4	42.149	0.042	1 135.0	0.7	2 796	4
	270	55.052	0.017	1.302 3	0.000 4	35.599	0.036	1 185.2	0.8	2 790	4
	280	64.191	0.020	1.332 1	0.000 4	30.133	0.030	1 236.8	0.8	2 780	4
	290	74.449	0.022	1.365 5	0.000 5	25.537	0.030	1 290	1	2 766	4
	300	85.917	0.024	1.403 6	0.000 7	21.643	0.035	1 345	1	2 749	4
	310	98.694	0.030	1.447 5	0.000 7	18.316	0.035	1 402	2	2 727	5
	320	112.89	0.03	1.499 2	0.000 7	15.451	0.035	1 462	2	2 700	6
	330	128.64	0.04	1.562	0.001	12.967	0.035	1 526	2	2 666	6
	340	146.08	0.04	1.639	0.001	10.779	0.035	1 596	3	2 623	7
	350	165.37	0.04	1.741	0.001	8.805	0.035	1 672	3	2 565	8
	360	186.74	0.05	1.894	0.004	6.943	0.040	1 762	3	2 481	8
	370	210.53	0.05	2.22	0.02	4.93	0.10	1 892	6	2 331	12
	371	213.06	0.10	2.29	0.02	4.68	0.10	1 913	6	2 305	14
	372	215.63	0.11	2.38	0.03	4.40	0.11	1 937	9	2 273	16
	373	218.2	0.1	2.51	0.04	4.05	0.12	1 969	14	2 230	18
	374	220.9	0.1	2.80	0.15	3.47	0.12	2 032	20	2 146	30
(4)	374.15 ±0.10	221.2	0.1	3.17	0.15	3.17	0.15	2 095	30	2 095	30

NOTES - (1) The specific internal energy is made exactly zero for the liquid phase at the triple point.

(2) The states here shown are metastable.

(3) At a pressure of exactly 1.013 25 bar the saturation temperature has the exact assigned value of 100°C on the International Practical Scale of Temperature, 1948.

At a temperature of exactly 100°C on the Thermodynamic Celsius Scale the saturation pressure is 1.013 25 bar, with a tolerance of 0.000 04 bar.

(4) Near the critical point, the tolerances on the specific volume and on the specific enthalpy in the vapor phase are correlated with the corresponding tolerances in the liquid phase. The tolerances on the changes in specific volume and in specific enthalpy on evaporation tend to zero as the critical point is approached.

(*Continued*)

Table 12B International Skeleton Tables (1963)—Specific Volume v of Compressed Water and Superheated Steam in cm^3/g

Of each pair of figures the upper represents the adopted value and the lower the tolerance (±).

Pressure bar	Temperature °C																			
	0	50	100	150	200	250	300	350	375	400	425	450	475	500	550	600	650	700	750	800
1) 1	1 000 2	1 012 1	1 696	1 936	2 173	2 406	2 639	2 871	2 987	3 103	3 218	3 334	3 450	3 565	3 797	4 028	4 259	4 490	4 721	4 952
	0 000 1	0 000 2	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	.2	2	2
5	0 999 9	1 011 9	1 043 3	1 090 6	425 1	474 4	522 5	570 1	593 7	617 2	640 6	664 1	687 5	710 8	757 4	803 9	850 4	896.9	943 2	989 6
	0 000 2	0 000 2	0 000 2	0 000 3	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4
10	0 999 7	1 011 7	1 043 1	1 090 3	206 0	232 7	257 9	282 4	294 5	306 5	318 4	330 3	342 2	354 0	377 5	401 0	424 4	447.7	471 1	494 3
	0 000 2	0 000 2	0 000 2	0 000 3	0 3	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2
25	0 998 9	1 011 0	1 042 3	1 089 4	1 155 6	87 0	98 9	109 7	114 9	120 0	125 0	130 0	135 0	139 9	149 6	159 2	168.8	178 3	187 7	197 2
	0 000 2	0 000 2	0 000 2	0 000 3	0 000 3	0 2	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 2	0 2	0 2	0 2
50	0 997 6	1 009 9	1 041 0	1 087 8	1 153 1	1 249 5	45 34	51 93	54 90	57 76	60 53	63 24	65 89	68 50	73 61	78 62	83 6	88 4	93 3	98 1
	0 000 2	0 000 2	0 000 2	0 000 3	0 000 3	0 000 4	0 07	0 08	0 09	0 09	0 09	0 09	0 09	0 10	0 10	0 10	0 1	0 1	0 1	0 1
75	0 996 4	1 008 8	1 039 8	1 086 2	1 150 7	1 245 2	26 71	32 44	34 75	36 91	38 96	40 93	42 83	44 69	48 28	51 76	55 16	58 52	61 82	65 09
	0 000 2	0 000 2	0 000 3	0 000 4	0 000 4	0 000 4	0 05	0 07	0 08	0 08	0 08	0 08	0 08	0 08	0 08	0 08	0 08	0 08	0 08	0 08
100	0 995 2	1 007 7	1 038 6	1 084 6	1 148 3	1 240 9	1 397	22 44	24 53	26 40	28 12	29 73	31 26	32 76	35 61	38 32	40 96	43.55	46 09	48 58
	0 000 2	0 000 2	0 000 4	0 000 4	0 000 4	0 000 4	0 001	0 05	0 05	0 05	0 05	0 05	0 06	0 07	0 07	0 07	0 08	0 08	0 08	0 08
125	0 994 0	1 006 6	1 037 3	1 083 0	1 146 0	1 236 7	1 387	16 14	18 25	20 01	21 56	22 98	24 31	25 59	27 99	30 26	32 44	34 56	36 64	38 68
	0 000 2	0 000 2	0 000 4	0 000 4	0 000 4	0 000 4	0 001	0 05	0 04	0 04	0 04	0 04	0 04	0 05	0 05	0 05	0 06	0 06	0 07	0 07
150	0 992 8	1 005 5	1 036 1	1 081 3	1 143 6	1 232 7	1 378	11 49	13 91	15 65	17 14	18 45	19 65	20 80	22 91	24 88	26 77	28 59	30 35	32 09
	0 000 2	0 000 2	0 000 4	0 000 4	0 000 4	0 000 5	0 001	0 04	0 04	0 04	0 04	0 04	0 04	0 04	0 04	0 04	0 05	0 06	0 06	0 07
175	0 991 5	1 004 4	1 034 8	1 079 8	1 141 4	1 228 8	1 369	1 716	10 57	12 46	13 93	15 19	16 31	17 36	19 28	21 04	22 71	24 31	25 86	27 38
	0 000 2	0 000 2	0 000 4	0 000 4	0 000 4	0 000 5	0 001	0 002	0 04	0 04	0 03	0 03	0 03	0 04	0 04	0 04	0 04	0 05	0 05	0 06
200	0 990 4	1 003 3	1 033 6	1 078 2	1 139 1	1 225 1	1 360	1 665	7 68	9 95	11 47	12 71	13 79	14 78	16 55	18 16	19 67	21 11	22 50	23 85
	0 000 2	0 000 2	0 000 4	0 000 4	0 000 4	0 000 5	0 001	0 002	0 03	0 03	0 03	0 03	0 03	0 03	0 03	0 04	0 04	0 05	0 05	0 06
225	0 989 2	1 002 3	1 032 4	1 076 6	1 136 9	1 221 5	1 352	1 630	2 49	7 86	9 51	10 76	11 81	12 76	14 42	15 92	17 31	18 62	19 88	21 10
	0 000 2	0 000 2	0 000 4	0 000 4	0 000 4	0 000 5	0 001	0 002	0 04	0 03	0 03	0 03	0 03	0 03	0 03	0 03	0 04	0 05	0 05	0 05
250	0 988 0	1 001 2	1 031 3	1 075 1	1 134 7	1 217 9	1 345	1 600	1 98	6 00	7 89	9 17	10 22	11 14	12 72	14 12	15 42	16 63	17 79	18 91
	0 000 2	0 000 2	0 000 4	0 000 4	0 000 4	0 000 5	0 001	0 002	0 02	0 03	0 02	0 02	0 02	0 02	0 02	0 02	0 03	0 04	0 05	0 05
275	0 986 8	1 000 2	1 030 1	1 073 6	1 132 6	1 214 4	1 338	1 576	1 865	4 19	6 50	7 85	8 90	9 79	11 32	12 65	13 86	15 00	16 08	17 11
	0 000 2	0 000 2	0 000 4	0 000 4	0 000 4	0 000 5	0 001	0 002	0 010	0 03	0 02	0 02	0 02	0 02	0 02	0 02	0 03	0 03	0 04	0 04
300	0 985 6	0 999 2	1 028 9	1 072 1	1 130 4	1 211 1	1 331	1 555	1 797	2 82	5 298	6 736	7 799	8 682	10 16	11 43	12 58	13 64	14 65	15 62
	0 000 2	0 000 2	0 000 4	0 000 4	0 000 4	0 000 5	0 001	0 002	0 008	0 02	0 020	0 020	0 020	0 020	0 02	0 02	0 02	0 03	0 03	0 04
350	0 983 4	0 997 2	1 026 7	1 069 2	1 126 4	1 204 6	1 319	1 519	1 705	2 111	3 430	4 956	6 054	6 928	8 340	9 516	10 56	11 52	12 42	13 27
	0 000 2	0 000 2	0 000 4	0 000 4	0 000 4	0 000 6	0 001	0 003	0 006	0 010	0 012	0 014	0 014	0 015	0 016	0 018	0 02	0 03	0 03	0 04
400	0 981 1	0 995 1	1 024 4	1 066 4	1 122 4	1 198 4	1 308	1 489	1 644	1 912	2 546	3 686	4 758	5 620	6 980	8 086	9 051	9 93	10 75	11 52
	0 000 2	0 000 2	0 000 4	0 000 4	0 000 4	0 000 6	0 001	0 003	0 005	0 007	0 009	0 012	0 012	0 013	0 014	0 016	0 018	0 02	0 03	0 03
450	0 978 8	0 993 2	1 022 2	1 063 6	1 118 6	1 192 5	1 297	1 464	1 599	1 804	2 191	2 916	3 814	4 628	5 934	6 982	7 885	8 70	9 45	10 16
	0 000 2	0 000 2	0 000 4	0 000 4	0 000 4	0 000 6	0 001	0 003	0 005	0 006	0 007	0 009	0 010	0 010	0 011	0 013	0 015	0 02	0 02	0 03
500	0 976 6	0 991 2	1 020 0	1 060 9	1 114 8	1 186 8	1 288	1 443	1 564	1 731	2 010	2 492	3 170	3 884	5 114	6 108	6 960	7 72	8 42	9 07
	0 000 2	0 000 3	0 000 4	0 000 5	0 000 5	0 000 6	0 001	0 003	0 005	0 005	0 006	0 006	0 008	0 008	0 010	0 012	0 014	0 02	0 02	0 03
550	0 974 5	0 989 2	1 017 8	1 058 2	1 111 1	1 181 3	1 278	1 424	1 533	1 677	1 896	2 245	2 750	3 342	4 464	5 404	6 209	6 93	7 58	8 19
	0 000 3	0 000 3	0 000 4	0 000 5	0 000 5	0 000 6	0 001	0 003	0 005	0 005	0 005	0 005	0 006	0 007	0 008	0 010	0 012	0 02	0 02	0 02
600	0 972 3	0 987 3	1 015 7	1 055 6	1 107 5	1 176 0	1 270	1 407	1 507	1 634	1 816	2 085	2 474	2 950	3 950	4 831	5 592	6 27	6 89	7 46
	0 000 3	0 000 3	0 000 4	0 000 5	0 000 5	0 000 6	0 001	0 003	0 005	0 004	0 004	0 004	0 005	0 006	0 008	0 009	0 011	0 02	0 02	0 02
650	0 970 3	0 985 4	1 013 7	1 053 0	1 104 0	1 170 9	1 261	1 393	1 484	1 599	1 756	1 976	2 283	2 672	3 543	4 360	5 080	5 72	6 31	6 85
	0 000 3	0 000 3	0 000 4	0 000 5	0 000 5	0 000 7	0 001	0 003	0 005	0 004	0 004	0 004	0 005	0 005	0 007	0 008	0 010	0 02	0 02	0 02
700	0 968 2	0 983 6	1 011 6	1 050 5	1 100 6	1 166 0	1 254	1 380	1 464	1 569	1 706	1 892	2 144	2 466	3 221	3 971	4 648	5 26	5 81	6 32
	0 000 3	0 000 3	0 000 4	0 000 5	0 000 5	0 000 7	0 001	0 003	0 005	0 004	0 004	0 004	0 004	0 005	0 006	0 007	0 009	0 01	0 02	0 02
750	0 966 2	0 981 8	1 009 6	1 048 0	1 097 3	1 161 4	1 246	1 367	1 446	1 543	1 665	1 828	2 040	2 310	2 965	3 648	4 283	4 86	5 39	5 87
	0 000 3	0 000 3	0 000 4	0 000 5	0 000 5	0 000 8	0 001	0 003	0 004	0 004	0 004	0 004	0 004	0 005	0 006	0 007	0 008	0 01	0 02	0 02
800	0 964 2	0 980 0	1 007 6	1 045 6	1 094 1	1 156 8	1 239	1 355	1 430	1 519	1 631	1 775	1 958	2 189	2 760	3 380	3 972	4 52	5 02	5 48
	0 000 3	0 000 3	0 000 4	0 000 5	0 000 5	0 000 8	0 001	0 003	0 004	0 003	0 003	0 004	0 004	0 004	0 006	0 007	0 008	0 01	0 01	0 02
850	0 962 2	0 978 2	1 005 7	1 043 2	1 091 0	1 152 4	1 232	1 345	1 415	1 498	1 602	1 731	1 892	2 092	2 594	3 155	3 706	4 22	4 70	5 14
	0 000 3	0 000 3	0 000 4	0 000 5	0 000 5	0 000 8	0 002	0 004	0 004	0 003	0 003	0 003	0 004	0 004	0 005	0 006	0 008	0 01	0 01	0 02
900	0 960 3	0 976 5	1 003 8	1 040 9	1 087 9	1 148 1	1 226	1 334	1 401	1 480	1 576	1 693	1 837	2 014	2 458	2 966	3 478	3 97	4 42	4 84
	0 000 3	0 000 3	0 000 4	0 000 5	0 000 5	0 000 9	0 002	0 004	0 004	0 003	0 003	0 003	0 004	0 004	0 005	0 006	0 007	0 01	0 01	0 02
950	0 958 4	0 974 8	1 001 9	1 038 6	1 084 8	1 143 9	1 220	1 324	1 388	1 463	1 552	1 660	1 790	1 948	2 344	2 806	3 282	3 74	4 17	4 57
	0 000 3	0 000 3	0 000 4	0 000 5	0 000 5	0 001 0	0 003	0 004	0 004	0 003	0 003	0 003	0 004	0 004	0 005	0 006	0 007	0.01	0 01	0 02
1 000	0 956 6	0 973 1	1 000 0	1 036 3	1 081 8	1 139 8	1 214	1 314	1 376	1 447	1 530	1 630	1 750	1 892	2 248	2 670	3 111	3 54	3 95	4 34
	0 000 3	0 000 3	0 000 4	0 000 5	0 000 5	0 001 2	0 003	0 004	0 004	0 003	0 003	0 003	0 004	0 004	0 005	0 005	0 006	0 01	0 01	0 02

Note (1) The entry shown for 0°C and 1 bar relates to a metastable liquid state The stable state here is solid

TABLE 12 INTERNATIONAL SKELETON TABLES (1963, 1975 AND 1977)—*Contd*

Table 12C International Skeleton Tables (1963)—Specific Enthalpy of Compressed Water and Superheated Steam in J/g

(1) Of each pair of figures the upper represents the adopted value and the lower the tolerance (±).

Pressure bar	Temperature °C 0	50	100	150	200	250	300	350	375	400	425	450	475	500	550	600	650	700	750	800
0	2 502 2	2 595 2	2 689 2	2 784 2	2 880 2	2 978 2	3 077 2	3 178 2	3 229 2	3 280 2	3 332 2	3 384 2	3 436 2	3 489 2	3 597 3	3 706 3	3 817 4	3 929 4	4 043 4	4 159 4
(2) 1	0.08 0.01	209.3 0.1	2 676 2	2 777 2	2 876 2	2 975 2	3 074 3	3 176 3	3 227 3	3 278 3	3 330 3	3 383 3	3 435 3	3 488 3	3 596 3	3 705 3	3 816 4	3 928 4	4 043 4	4 159 4
5	0.47 0.02	209.6 0.2	419.4 0.2	632.2 0.3	2 857 3	2 961 3	3 064 4	3 168 4	3 220 4	3 272 4	3 325 4	3 377 4	3 430 4	3 484 4	3 592 4	3 702 4	3 813 4	3 926 4	4 040 4	4 157 4
10	0.98 0.02	210.1 0.2	419.7 0.4	632.4 0.4	2 830 4	2 943 3	3 051 4	3 158 4	3 211 4	3 264 4	3 317 4	3 371 4	3 425 4	3 478 4	3 587 5	3 698 5	3 810 5	3 923 5	4 038 6	4 155 6
25	2.50 0.05	211.3 0.2	421.0 0.4	633.4 0.4	852.8 0.4	2 881 5	3 009 5	3 126 4	3 184 4	3 240 4	3 295 4	3 350 4	3 406 4	3 462 4	3 574 5	3 686 5	3 799 5	3 914 6	4 030 6	4 147 6
50	5.05 0.10	213.5 0.2	422.8 0.4	634.9 0.4	853.8 0.4	1 085.8 0.5	2 925 5	3 068 5	3 134 4	3 196 4	3 257 4	3 317 4	3 375 4	3 434 4	3 550 5	3 666 5	3 782 5	3 898 6	4 016 6	4 136 6
75	7.58 0.15	215.7 0.2	424.7 0.4	636.5 0.4	855.0 0.5	1 085.9 0.5	2 814 6	3 003 5	3 079 4	3 149 4	3 216 4	3 280 4	3 342 4	3 404 4	3 526 5	3 645 6	3 764 6	3 883 6	4 003 6	4 124 6
100	10.1 0.2	217.9 0.2	426.6 0.4	638.1 0.4	856.1 0.5	1 086.0 0.5	1 343 1	2 924 5	3 017 4	3 098 4	3 172 4	3 242 4	3 309 4	3 374 4	3 501 6	3 625 8	3 747 8	3 868 8	3 990 8	4 112 8
125	12.6 0.3	220.0 0.2	428.5 0.4	639.7 0.4	857.2 0.5	1 086.1 0.6	1 340 1	2 826 6	2 946 6	3 041 5	3 125 4	3 201 4	3 273 4	3 343 5	3 476 8	3 604 10	3 729 10	3 852 10	3 976 10	4 100 10
150	15.1 0.3	222.1 0.2	430.4 0.4	641.3 0.4	858.3 0.5	1 086.3 0.6	1 338 1	2 692 8	2 861 8	2 978 6	3 073 5	3 157 5	3 235 5	3 310 5	3 450 8	3 582 10	3 711 10	3 836 10	3 962 10	4 089 10
175	17.6 0.4	224.3 0.3	432.3 0.4	642.9 0.4	859.5 0.5	1 086.5 0.6	1 336 1	1 663 3	2 755 8	2 905 6	3 017 6	3 111 6	3 196 6	3 277 6	3 423 8	3 560 10	3 692 10	3 821 11	3 949 11	4 077 11
200	20.1 0.4	226.5 0.3	434.2 0.4	644.5 0.4	860.6 0.6	1 086.8 0.6	1 334 1	1 646 3	2 605 8	2 819 8	2 955 6	3 062 6	3 155 6	3 241 6	3 396 8	3 538 10	3 673 10	3 805 11	3 935 11	4 065 11
225	22.6 0.5	228.6 0.3	436.1 0.4	646.1 0.4	861.8 0.6	1 087.3 0.7	1 332 1	1 633 3	1 980 12	2 715 8	2 885 6	3 009 6	3 112 6	3 205 6	3 368 8	3 515 10	3 654 10	3 789 11	3 922 11	4 053 12
250	25.1 0.5	230.7 0.3	438.0 0.4	647.7 0.4	863.0 0.6	1 087.7 0.8	1 331 1	1 623 3	1 850 8	2 580 8	2 807 6	2 952 6	3 066 6	3 167 6	3 339 8	3 492 10	3 635 10	3 773 12	3 908 12	4 041 13
275	27.5 0.5	232.8 0.3	439.9 0.4	649.3 0.4	864.2 0.6	1 088.2 0.8	1 330 1	1 615 3	1 814 8	2 383 8	2 718 6	2 890 6	3 018 6	3 125 6	3 308 8	3 467 10	3 615 10	3 757 12	3 894 13	4 030 13
300	30.0 0.5	235.0 0.3	441.8 0.4	650.9 0.4	865.4 0.6	1 088.7 0.8	1 329 1	1 609 3	1 791 6	2 157 8	2 614 6	2 822 6	2 967 6	3 084 6	3 278 8	3 444 10	3 596 10	3 740 13	3 880 13	4 018 13
350	34.9 0.6	239.2 0.3	445.6 0.4	654.1 0.4	867.9 0.6	1 090 1	1 327 1	1 598 3	1 762 6	1 992 8	2 375 6	2 672 6	2 858 6	2 998 6	3 216 8	3 396 10	3 557 10	3 708 13	3 853 13	3 994 13
400	39.7 0.7	243.5 0.3	449.4 0.4	657.4 0.4	870.4 0.6	1 091 1	1 325 1	1 590 3	1 743 6	1 934 8	2 203 6	2 514 6	2 741 6	2 906 6	3 153 8	3 347 10	3 518 10	3 676 13	3 826 13	3 971 14
450	44.6 0.8	247.7 0.4	453.2 0.4	660.7 0.4	873.0 0.6	1 092 1	1 324 1	1 582 3	1 729 6	1 901 8	2 115 6	2 380 6	2 624 6	2 813 6	3 088 8	3 298 10	3 478 10	3 643 13	3 798 13	3 948 13
500	49.3 0.8	252.0 0.4	457.0 0.4	664.0 0.4	875.6 0.6	1 094 1	1 324 2	1 577 3	1 717 6	1 878 8	2 064 6	2 288 6	2 522 6	2 723 6	3 023 8	3 249 10	3 439 10	3 611 13	3 771 13	3 925 14
550	54.1 0.8	256.2 0.4	460.8 0.4	667.3 0.4	878.4 0.6	1 096 1	1 323 2	1 572 3	1 709 6	1 860 8	2030 8	2 228 8	2 439 8	2 641 8	2 960 8	3 200 10	3 400 10	3 579 13	3 744 13	3 902 14
600	58.8 0.9	260.4 0.4	464.6 0.4	670.6 0.4	881.1 0.7	1 097 1	1 323 2	1 568 3	1 702 6	1 847 8	2 005 8	2 183 8	2 378 8	2 571 8	2 900 8	3 153 10	3 362 10	3 547 13	3 718 13	3 879 13
650	63.5 1.0	264.6 0.4	468.4 0.4	674.0 0.5	883.8 0.8	1 099 1	1 323 2	1 565 3	1 696 6	1 836 8	1 986 8	2 151 8	2 330 8	2 514 8	2 844 8	3 107 10	3 324 10	3 516 13	3 692 13	3 857 15
700	68.1 1.0	268.8 0.5	472.1 0.5	677.3 0.5	886.6 0.8	1 101 1	1 323 2	1 562 3	1 691 6	1 828 8	1 971 8	2 126 8	2 294 8	2 468 8	2 793 8	3 062 10	3 288 10	3 486 13	3 666 14	3 836 16
750	72.7 1.1	273.0 0.6	476.0 0.5	680.7 0.5	889.3 0.9	1 103 1	1 324 2	1 560 4	1 687 6	1 820 8	1 958 8	2 106 8	2 265 8	2 430 8	2 748 8	3 021 10	3 253 10	3 456 13	3 641 15	3 814 17
800	77.3 1.2	277.1 0.7	479.8 0.7	684.0 0.7	892.2 0.9	1 105 1	1 324 2	1 559 4	1 684 6	1 814 8	1 948 8	2 090 8	2 241 8	2 399 8	2 709 8	2 983 10	3 219 10	3 428 13	3 617 15	3 793 18
850	81.9 1.2	281.3 0.8	483.6 0.8	687.4 0.8	895.0 1.0	1 107 2	1 325 2	1 557 4	1 681 6	1 806 8	1 938 8	2 077 8	2 222 8	2 373 8	2 674 8	2 948 10	3 187 10	3 400 13	3 593 16	3 773 19
900	86.5 1.2	285.4 0.9	487.3 0.9	690.8 0.9	898.0 1.0	1 109 2	1 326 2	1 557 4	1 678 6	1 804 8	1 932 8	2 065 8	2 206 8	2 351 8	2 644 8	2 916 10	3 157 10	3 373 13	3 570 16	3 753 20
950	91.1 1.2	289.6 1.0	491.2 1.0	694.2 1.0	900.9 1.3	1 111 2	1 327 3	1 556 5	1 676 6	1 799 8	1 925 8	2 056 8	2 193 8	2 333 8	2 618 8	2 887 10	3 129 10	3 348 13	3 548 16	3 734 20
1 000	95.7 1.2	293.7 1.2	495.0 1.2	697.6 1.2	903.8 1.5	1 114 2	1 328 3	1 555 5	1 674 6	1 796 8	1 920 8	2 047 8	2 181 8	2 318 8	2 595 8	2 861 10	3 103 10	3 324 13	3 527 16	3 715 20

NOTES — (1) The specific internal energy is made exactly zero for the liquid phase at the triple point.

(2) The entry shown for 0°C and 1 bar relates to a metastable liquid state. The stable state here is solid.

(Continued)

Table 12D International Skeleton Tables (1975)—Dynamic Viscosity μ of Compressed Water and Superheated Steam in 10^{-6} Pa · s.

Of each pair of figures the upper represents the adopted value and the lower the tolerance (±).

Pressure MPa	Temperature °C																					
	0	25	50	75	100	150	200	250	300	350	375	400	425	450	475	500	550	600	650	700	750	800
0.1	1791	890.9	547.1	377.3	12.42	14.29	16.26	18.30	20.36	22.43	23.45	24.47	25.49	26.50	27.51	28.52	30.53	32.55	34.6	36.6	38.6	40.5
	18	8.9	5.5	3.8	0.25	0.29	0.33	0.37	0.41	0.45	0.47	0.49	0.51	0.53	0.55	0.86	0.92	0.98	1.0	1.1	1.2	1.2
0.5	1790	891.2	546.7	378.0	281.7	182.3	16.05	18.16	20.25	22.32	23.43	24.44	25.49	26.53	27.57	28.64	30.67	32.77	34.7	36.7	38.5	40.3
	18	8.9	5.5	3.8	2.8	1.8	0.32	0.36	0.41	0.45	0.47	0.49	0.51	0.53	0.55	0.86	0.92	0.98	1.0	1.1	1.2	1.2
1	1789	891.1	546.8	378.2	281.9	182.4	15.92	18.09	20.21	22.29	23.40	24.43	25.49	26.53	27.58	28.65	30.68	32.79	34.8	36.8	38.5	40.4
	18	8.9	5.5	3.8	2.8	1.8	0.32	0.36	0.40	0.45	0.47	0.49	0.51	0.53	0.55	0.86	0.92	0.98	1.0	1.1	1.2	1.2
2.5	1786	890.8	547.1	378.5	282.3	182.8	134.6	17.85	20.07	22.22	23.37	24.41	25.49	26.54	27.59	28.66	30.72	32.84	34.8	36.8	38.6	40.4
	18	8.9	5.5	3.8	2.8	1.8	1.4	0.36	0.40	0.44	0.47	0.49	0.51	0.53	0.55	0.86	0.92	0.99	1.0	1.1	1.2	1.2
5	1780	890.3	547.7	379.2	283.1	183.4	135.2	106.5	19.88	22.15	23.33	24.42	25.52	26.60	27.66	28.73	30.82	32.77	34.9	36.9	38.7	40.6
	18	8.9	5.5	3.8	2.8	1.8	1.4	1.1	0.40	0.44	0.47	0.49	0.51	0.53	0.55	0.86	0.92	0.98	1.1	1.1	1.2	1.2
7.5	1774	889.8	548.3	379.8	283.8	184.1	135.9	107.2	19.75	22.12	23.34	24.46	25.58	26.68	27.76	28.81	30.94	32.87	34.9	37.0	38.8	40.7
	18	8.9	5.5	3.8	2.8	1.8	1.4	1.1	0.40	0.44	0.47	0.49	0.51	0.53	0.56	0.86	0.93	0.99	1.1	1.1	1.2	1.2
10	1768	889.4	548.7	380.4	284.7	184.7	136.4	107.8	87.1	22.16	23.39	24.52	25.65	26.75	27.82	28.95	31.08	33.02	35.1	37.2	39.0	40.9
	18	8.9	5.5	3.8	2.9	1.9	1.4	1.1	1.7	0.44	0.47	0.49	0.51	0.53	0.56	0.87	0.93	0.99	1.1	1.1	1.2	1.2
12.5	1762	889.1	549.1	381.0	285.3	185.3	137.0	108.5	88.0	22.35	23.57	24.69	25.81	26.91	27.98	29.09	31.19	33.2	35.2	37.4	39.2	41.1
	18	8.9	5.5	3.8	2.9	1.9	1.4	1.1	1.8	0.45	0.47	0.49	0.52	0.54	0.56	0.87	0.94	1.0	1.1	1.1	1.2	1.2
15	1756	888.7	549.5	381.6	286.0	186.0	137.6	109.1	89.0	22.84	23.88	24.98	26.06	27.13	28.18	29.30	31.44	33.4	35.5	37.6	39.4	41.2
	18	8.9	5.5	3.8	2.9	1.9	1.4	1.1	1.8	0.46	0.48	0.50	0.52	0.54	0.56	0.88	0.94	1.0	1.1	1.1	1.2	1.2
17.5	1750	888.5	550.0	382.3	286.7	186.6	138.2	109.8	89.9	67.3	24.49	25.37	26.38	27.42	28.42	29.49	31.70	33.7	35.7	37.8	39.6	41.4
	18	8.9	5.5	3.8	2.9	1.9	1.4	1.1	1.8	2.0	0.49	0.51	0.53	0.55	0.57	0.88	0.95	1.0	1.1	1.1	1.2	1.2
20	1744	888.2	550.4	382.9	287.4	187.3	138.8	110.4	90.8	69.5	25.85	26.03	26.83	27.80	28.76	29.81	31.98	33.9	35.9	38.0	39.8	41.6
	17	8.9	5.5	3.8	2.9	1.9	1.4	1.1	1.8	2.1	0.52	0.52	0.54	0.56	0.58	0.89	0.96	1.0	1.1	1.1	1.2	1.3
22.5	1738	887.9	550.9	383.5	288.0	187.9	139.4	111.1	91.6	71.4	48.2	27.11	27.50	28.31	29.17	30.17	32.38	34.2	36.2	38.2	39.8	41.9
	17	8.9	5.5	3.8	2.9	1.9	1.4	1.1	1.8	2.1	3.9	0.54	0.55	0.57	0.58	0.91	0.97	1.0	1.1	1.2	1.2	1.3
25	1733	887.6	551.3	384.2	288.7	188.5	140.0	111.7	92.4	73.0	58.8	29.10	28.43	28.99	29.70	30.56	32.73	34.6	36.5	38.5	40.2	41.9
	17	8.9	5.5	3.8	2.9	1.9	1.4	1.1	1.9	2.2	1.2	0.58	0.57	0.58	0.59	0.92	0.98	1.0	1.1	1.2	1.2	1.3
27.5	1728	887.4	551.8	384.8	289.4	189.1	140.6	112.3	93.1	74.4	62.4	33.88	29.81	29.84	30.33	31.08	33.11	34.9	36.8	38.7	40.4	42.2
	17	8.9	5.5	3.9	2.9	1.9	1.4	1.1	1.9	2.2	1.2	0.68	0.60	0.60	0.61	0.93	0.99	1.1	1.1	1.2	1.2	1.3
30	1723	887.2	552.3	385.5	290.0	189.8	141.2	112.9	93.9	75.7	64.9	43.97	31.84	30.97	31.06	31.68	33.6	35.3	37.2	39.0	40.7	42.5
	17	8.9	5.5	3.9	2.9	1.9	1.4	1.1	1.9	2.3	1.3	0.88	0.64	0.62	0.62	0.95	1.0	1.1	1.1	1.2	1.2	1.3
35	1713	886.8	553.3	386.7	291.4	191.0	142.3	114.1	95.3	78.0	68.6	56.4	39.47	34.19	33.17	33.10	34.6	36.1	37.9	39.8	41.3	43.0
	17	8.9	5.5	3.9	2.9	1.9	1.4	1.1	1.9	2.3	1.4	1.1	0.79	0.68	0.66	0.99	1.0	1.1	1.1	1.2	1.2	1.3
40	1705	886.6	554.3	388.0	292.7	192.2	143.5	115.3	96.5	79.9	71.3	62.1	49.26	39.16	36.06	35.2	35.7	37.5	38.8	40.4	42.0	43.7
	17	8.9	5.5	3.9	2.9	1.9	1.4	1.2	1.9	2.4	1.4	1.2	0.99	0.78	0.72	1.1	1.1	1.1	1.2	1.2	1.3	1.3
45	1697	886.5	555.3	389.3	294.0	193.4	144.6	116.4	97.8	81.7	73.7	65.8	55.6	44.87	39.90	37.6	37.4	38.6	40.0	41.2	43.1	44.4
	17	8.9	5.6	3.9	2.9	1.9	1.5	1.2	2.0	2.5	1.5	1.3	1.1	0.90	0.80	1.1	1.1	1.2	1.2	1.2	1.3	1.3
50	1690	886.4	556.3	390.6	295.4	194.6	145.8	117.6	99.0	83.4	75.9	68.2	60.1	50.5	44.0	40.5	39.1	40.0	40.6	42.2	43.7	45.3
	17	8.9	5.6	3.9	3.0	2.0	1.5	1.2	2.0	2.5	2.3	2.0	1.8	1.5	1.3	1.2	1.2	1.2	1.2	1.3	1.3	1.4
55	1684	886.5	557.4	392.0	296.7	195.8	146.9	118.7	100.2	84.9	77.8	70.9	63.6	55.3	48.4	43.9	41.0	41.4	41.8	42.5	44.6	45.9
	17	8.9	5.6	3.9	3.0	2.0	1.5	1.2	2.0	2.6	2.3	2.1	1.9	1.7	1.5	1.3	1.2	1.2	1.3	1.3	1.3	1.4
60	1679	886.7	558.5	393.3	298.0	197.0	148.0	119.7	101.3	86.3	79.5	73.1	66.1	59.2	52.3	47.6	43.1	41.7	42.9	43.2	44.8	46.6
	17	8.9	5.6	3.9	3.0	2.0	1.5	1.2	2.0	2.6	2.4	2.2	2.0	1.8	1.6	1.4	1.3	1.3	1.3	1.3	1.3	1.4
65	1674	886.9	559.7	394.6	299.4	198.2	149.0	120.8	102.5	87.7	81.1	75.2	68.1	62.3	55.5	50.8	45.1	43.2	43.9	44.2	45.4	46.8
	17	8.9	5.6	4.0	3.0	2.0	1.5	1.2	2.1	2.6	2.4	2.3	2.0	1.9	1.7	1.5	1.4	1.3	1.3	1.3	1.4	1.4
70	1670	887.3	560.9	395.9	300.7	199.4	150.1	121.9	103.6	89.0	82.5	76.9	70.5	64.9	58.8	53.7	47.5	44.8	44.3	44.4	46.2	47.4
	17	8.9	5.6	4.0	3.0	2.0	1.5	1.2	2.1	2.7	2.5	2.3	2.1	2.0	1.8	1.6	1.4	1.3	1.3	1.3	1.4	1.4
75	1666	887.7	562.0	397.3	302.0	200.6	151.2	122.9	104.6	90.3	83.9	78.5	72.2	66.9	61.3	56.2	49.7	45.7	45.5	45.6	46.8	48.1
	17	8.9	5.6	4.0	3.0	2.0	1.5	1.2	2.1	2.7	2.5	2.4	2.2	2.0	1.8	1.7	1.5	1.4	1.4	1.4	1.4	1.4
80	1662	888.3	563.3	398.6	303.4	201.8	152.3	123.9	105.6	91.4	85.2	79.9	74.0	68.3	63.6	58.7	52.1	47.4	47.0	46.6	47.3	48.6
	17	8.9	5.6	4.0	3.0	2.0	1.5	1.2	2.1	2.7	2.6	2.4	2.2	2.1	1.9	1.8	1.6	1.4	1.4	1.4	1.4	1.5
85	1659	888.8	564.5	400.0	304.6	203.0	153.3	124.9	106.6	92.6	86.4	81.4	75.8	70.2	65.5	60.8	54.0	49.9	47.6	47.6	48.1	49.0
	17	8.9	5.7	4.0	3.1	2.0	1.5	1.3	2.1	2.8	2.6	2.4	2.3	2.1	2.0	1.8	1.6	1.5	1.4	1.4	1.4	1.5
90	1656	889.5	565.8	401.4	305.9	204.2	154.3	125.9	107.6	93.7	87.5	82.7	77.2	72.3	67.3	62.8	55.8	51.4	48.9	49.1	48.9	49.7
	17	8.9	5.7	4.0	3.1	2.0	1.5	1.3	2.2	2.8	2.6	2.5	2.3	2.2	2.0	1.9	1.7	1.5	1.5	1.5	1.5	1.5
95	1653	890.3	567.1	402.8	307.3	205.4	155.4	126.9	108.6	94.7	88.7	83.6	78.6	73.8	69.1	64.6	57.7	53.6	50.9	49.5	49.8	50.3
	17	8.9	5.7	4.0	3.1	2.1	1.6	1.3	2.2	2.8	2.7	2.5	2.4	2.2	2.1	1.9	1.7	1.6	1.5	1.5	1.5	1.5
100	1651	891.1	568.4	404.2	308.6	206.5	156.4	127.9	109.6	95.8	89.8	85.0	79.8	74.6	69.8	66.1	59.3	55.1	52.1	50.5	51.1	51.0
	17	8.9	5.7	4.0	3.1	2.1	1.6	1.3	2.2	2.9	2.7	2.6	2.4	2.2	2.1	2.0	1.8	1.7	1.6	1.5	1.5	1.5

NOTE — The entry shown for 0°C and 0.1 MPa relates to a metastable liquid state. The stable state here is solid

(Continued)

TABLE 12 INTERNATIONAL SKELETON TABLES (1963, 1975 AND 1977)—Contd.

Table 12E International Skeleton Tables (1977)—Thermal Conductivity λ of Compressed Water and Superheated Steam in mW/(m · K)

Of each pair of figures the upper represents the adopted value and the lower the tolerance (±).

Pressure MPa	Temperature °C																					
	0	25	50	75	100	150	200	250	300	350	375	400	425	450	475	500	550	600	650	700	750	800
(1) 0.1	563	610	643	664	25.0	28.9	33.3	38.1	43.3	49.0	52.0	54.9	57.9	60.6	63.8	67.1	73.1	79.9	86.4	93.4	100.5	107.5
	11	9	9	10	0.5	0.6	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.2	1.3	1.3	1.5	2.4	2.6	2.8	3.0	3.2
0.5	563	610	643	664	680	688	34.1	38.7	43.7	49.1	52.6	55.5	58.5	61.4	64.5	67.7	74.0	80.5	87.2	93.8	100.9	108.0
	11	9	9	10	10	10	1.0	1.2	1.3	1.5	1.6	1.7	1.8	1.8	1.9	2.0	2.2	3.2	3.5	3.8	4.0	4.3
1.0	564	611	643	666	681	689	35.9	39.5	44.3	49.5	53.0	56.0	58.6	61.7	64.7	68.0	74.3	81.0	87.7	94.3	101.4	108.6
	11	9	9	10	10	10	1.4	1.2	1.3	1.5	1.6	1.7	1.8	1.9	1.9	2.0	2.2	3.2	3.5	3.8	4.1	4.3
2.5	566	611	644	666	682	690	668	43.8	46.5	50.9	54.7	56.9	59.6	62.6	65.6	68.7	75.1	81.5	88.8	95.3	102.4	109.5
	11	9	9	10	10	10	10	1.4	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.3	3.3	3.6	3.8	4.1	4.4
5	567	613	645	668	683	691	671	625	52.7	54.1	56.5	58.6	60.9	64.0	66.4	69.3	75.4	81.5	91.4	95.7	103.6	109.6
	11	12	12	13	13	13	13	12	1.6	1.9	1.7	1.8	1.8	1.9	2.0	2.1	2.3	3.3	3.7	3.8	4.1	4.4
7.5	570	614	647	669	685	694	673	628	63.6	59.6	60.5	62.7	64.0	66.7	69.5	73.3	80.0	87.3	96.4	101.0	108.1	112.4
	11	12	12	13	13	13	13	12	1.9	1.8	1.8	1.9	1.9	2.0	2.1	2.2	2.4	3.5	5.3	4.0	4.3	4.5
10	571	615	648	669	686	695	675	631	557	68.2	65.3	66.9	67.4	69.4	72.1	75.6	82.5	89.4	97.5	102.9	111.2	118.1
	11	12	13	13	13	13	13	12	11	2.0	2.1	2.0	2.0	2.1	2.2	2.3	2.5	3.6	4.6	4.1	5.1	5.2
12.5	571	616	649	672	687	697	678	634	562	81.2	73.6	72.4	72.0	74.1	76.1	79.4	85.0	90.7	97.9	102.9	109.9	116.3
	11	12	13	13	13	13	13	12	11	2.4	2.2	2.2	2.2	2.2	2.3	2.4	2.6	3.6	3.9	4.1	4.4	4.7
15	573	617	650	673	689	700	680	638	566	107.5	84.8	79.9	77.8	78.4	79.3	82.4	87.5	93.4	100.3	105.6	112.7	118.0
	11	12	13	13	13	14	13	12	11	6.7	2.5	2.4	2.3	2.4	2.4	2.5	2.6	3.7	4.0	4.2	4.5	4.7
17.5	573	618	651	674	691	701	682	639	571	452	104.2	90.0	84.8	84.0	84.2	85.7	90.2	96.2	102.5	106.0	114.4	119.7
	11	12	13	13	13	14	13	12	11	13	3.1	2.7	2.5	2.5	2.5	2.6	2.7	3.8	4.1	4.2	4.6	4.8
20	574	619	653	676	691	703	684	641	576	465	144.0	104.9	93.7	90.8	90.1	91.6	94.9	98.6	105.5	109.3	116.8	122.7
	11	12	13	13	13	14	13	12	11	14	4.7	3.1	2.8	2.7	2.7	2.7	3.0	3.9	4.2	4.4	4.7	4.9
22.5	574	620	654	678	692	705	686	646	581	476	478	124.1	105.9	98.6	95.9	96.0	98.1	102.6	107.6	112.1	119.2	123.7
	11	12	13	13	13	14	13	12	11	14	39	4.2	3.2	3.0	2.9	2.9	2.9	4.1	4.3	4.5	4.8	4.9
25	577	621	655	679	694	707	689	648	588	482	400	166.4	120.6	108.3	102.8	101.5	102.3	105.7	110.7	114.5	121.5	126.2
	11	12	13	13	13	14	13	13	11	14	14	6.7	3.6	3.2	3.1	3.0	3.1	4.2	4.4	4.6	4.9	5.0
27.5	578	622	656	680	696	708	690	651	589	490	413	240.8	139.2	120.3	111.1	107.3	106.1	108.7	113.0	118.0	123.4	127.8
	11	12	13	13	13	14	13	13	11	14	14	7.2	6.2	3.6	3.3	3.2	3.2	4.3	4.5	4.7	4.9	5.1
30	578	623	658	681	697	710	692	653	593	498	426	337	175.0	133.8	119.4	114.1	110.6	112.3	116.2	119.9	125.7	130.2
	11	12	13	13	13	14	13	13	11	15	13	12	8.1	4.0	3.6	3.4	3.3	4.5	4.6	4.8	5.0	5.2
35	580	625	660	684	700	714	696	660	601	511	453	284	260.5	176.3	144.3	129.7	121.1	119.8	122.7	125.1	130.0	134.6
	11	12	13	13	14	14	13	13	12	15	13	12	7.8	5.5	4.3	3.9	3.6	4.8	4.9	5.0	5.2	5.4
40	583	626	662	686	702	717	700	664	608	526	471	399	331	233.2	178.9	152.9	133.9	129.2	129.5	131.8	135.8	139.3
	11	12	13	13	14	14	14	13	12	15	14	15	10	7.2	5.5	4.6	4.0	5.2	5.2	5.3	5.4	5.6
45	584	629	664	690	705	721	704	670	615	537	486	425	365	287	219.0	180.1	148.2	138.5	136.4	137.7	141.1	144.5
	11	12	13	13	14	14	14	13	12	16	14	12	11	12	7.9	5.4	4.4	5.5	5.5	5.5	5.6	5.8
50	586	630	666	692	708	724	708	673	621	547	498	444	381	325	263	211	164	150	145	145	146	149
	11	12	13	13	14	14	14	13	12	44	40	36	30	26	21	17	13	12	12	12	12	12
55	589	633	667	694	710	726	712	678	629	558	510	461	401	354	297	244	184	162	154	152	153	155
	11	12	13	13	14	14	14	13	12	45	41	37	32	28	24	20	15	13	12	12	12	12
60	590	635	670	697	713	729	715	682	634	566	525	476	423	366	322	277	207	176	164	159	159	161
	11	12	13	13	14	14	14	13	12	45	42	38	34	29	26	22	16	14	13	13	13	13
65	592	638	673	699	715	733	718	688	639	574	535	489	438	387	332	299	228	191	175	168	166	167
	11	12	13	14	14	14	14	13	12	46	43	39	35	31	26	24	18	15	14	13	13	13
70	597	639	674	702	718	735	721	691	645	582	546	499	453	406	355	322	253	205	186	178	173	173
	11	12	13	14	14	14	14	13	12	47	44	40	36	32	28	26	21	16	15	14	14	14
75	599	641	675	705	720	738	725	696	648	589	554	511	467	421	376	327	269	218	198	186	180	178
	12	12	13	14	14	14	14	13	13	47	44	41	37	34	30	26	22	17	16	15	14	15
80	599	645	677	707	723	739	729	699	653	598	564	521	480	435	393	346	298	235	209	(196)	(190)	(185)
	12	12	13	14	14	14	14	14	13	48	45	42	38	35	31	28	33	19	17	16	15	15
85	601	646	680	706	726	742	732	702	659	604	571	532	488	448	410	366	312	246	222	(206)	(196)	(194)
	12	12	13	14	14	14	14	14	13	48	46	43	39	36	33	29	34	20	18	17	16	15
90	604	648	681	710	728	745	735	707	665	611	578	544	500	460	424	385	308	259	233	(215)	(205)	(201)
	12	13	13	14	14	14	14	14	13	49	46	44	40	37	34	31	25	21	19	17	16	16
95	608	650	685	713	731	748	739	711	669	615	586	553	510	473	435	396	322	273	243	(226)	(214)	(207)
	12	13	13	14	14	15	14	14	13	49	47	44	41	38	35	32	26	22	19	18	17	17
100	609	659	686	716	735	749	742	715	672	624	594	561	519	484	445	412	338	288	255	(236)	(221)	(215)
	12	13	13	14	14	15	14	14	13	50	47	45	42	39	36	33	27	23	20	19	18	17

NOTES — (1) The entry shown for 0°C and 0.1 MPa relates to a metastable liquid state. The stable state here is solid.
(2) The extrapolated values are distinguished by the parentheses.

(Continued)

Table 12F International Skeleton Table (1977)—Thermal Conductivity λ of Saturated Water and Saturated Steam

Temperature °C	Thermal Conductivity mW/(m · K)				Temperature °C	Thermal Conductivity mW/(m · K)			
	Water		Steam			Water		Steam	
		± Tolerance		± Tolerance			± Tolerance		± Tolerance
0	569	11	16.7	0.5	210	654	13	40.5	1.7
0.01	565	11	16.7	0.5	220	643	13	43.2	1.3
10	584	12	17.4	0.5	230	632	13	45.3	1.4
20	602	12	18.1	0.5	240	626	12	47.9	1.4
30	617	12	19.0	0.6	250	615	12	51.0	1.5
40	631	13	19.7	0.6	260	602	12	54.2	1.6
50	642	13	20.4	0.6	270	590	12	57.7	1.7
60	652	13	21.2	0.6	280	577	11	61.3	1.8
70	660	13	22.2	0.7	290	564	11	67.3	2.1
80	669	14	23.1	0.7	300	547	11	73.2	3.7
90	675	14	24.0	0.7	310	532	11	79.8	4.2
100	679	14	25.0	0.8	320	512	10	88.3	4.7
110	681	14	25.7	0.8	330	485	10	99.1	5.9
120	685	14	26.8	0.8	340	455	13	116.7	7.9
130	686	14	28.7	0.9	350	447	11	138	11
140	686	14	29.7	0.9	360	425	23	174	15
150	686	14	31.0	0.9	370	418	36	293	55
160	682	14	31.9	1.3	371	429	38	331	62
170	678	14	33.6	1.3	372	450	42	377	83
180	674	13	35.2	1.3	373	520	50	464	141
190	670	13	37.2	1.2	374	793	—	791	—
200	664	13	38.8	1.4	374.15	914	—	914	—

NOTE — The underlined state of 0°C is metastable

(Continued)

Table 12G International Skeleton Table (1975)—Surface Tension σ of Water

Temperature °C	Surface Tension mN/m		Temperature °C	Surface Tension mN/m		Temperature °C	Surface Tension mN/m	
		± Tolerance			± Tolerance			± Tolerance
0.01	75.64	0.38						
5	74.95	0.37	130	52.93	0.26	255	24.87	0.21
10	74.23	0.37	135	51.89	0.26	260	23.67	0.21
15	73.50	0.37	140	50.85	0.25	265	22.48	0.21
20	72.75	0.36	145	49.80	0.25	270	21.30	0.20
25	71.99	0.36	150	48.74	0.24	275	20.11	0.20
30	71.20	0.36	155	47.67	0.24	280	18.94	0.20
35	70.41	0.35	160	46.58	0.23	285	17.77	0.19
40	69.60	0.35	165	45.49	0.23	290	16.61	0.19
45	68.78	0.34	170	44.40	0.22	295	15.45	0.19
50	67.94	0.34	175	43.30	0.22	300	14.30	0.18
55	67.10	0.34	180	42.19	0.22	305	13.17	0.18
60	66.24	0.33	185	41.07	0.22	310	12.04	0.17
65	65.36	0.33	190	39.95	0.22	315	10.92	0.16
70	64.47	0.32	195	38.82	0.22	320	9.81	0.16
75	63.58	0.32	200	37.69	0.22	325	8.73	0.15
80	62.67	0.31	205	36.55	0.22	330	7.66	0.14
85	61.75	0.31	210	35.41	0.22	335	6.61	0.13
90	60.82	0.30	215	34.25	0.22	340	5.59	0.12
95	59.87	0.30	220	33.10	0.22	345	4.60	0.11
100	58.91	0.29	225	31.93	0.22	350	3.65	0.10
105	57.94	0.29	230	30.77	0.22	355	2.75	0.10
110	56.96	0.28	235	29.66	0.22	360	1.90	0.10
115	55.97	0.28	240	28.42	0.22	365	1.13	0.10
120	54.96	0.27	245	27.24	0.22	370	0.45	0.10
125	53.95	0.27	250	26.06	0.22	374.00	0.00	—

(Continued)

6. CONVERSION FACTORS OF UNITS

Pressure

	MPa	at (kgf/cm^2)
1 MPa = 10 bar =	1	10.1972
1 at (kgf/cm^2 =	0.098 0665	1

1 MPa = 10^3kPa = 10^6 Pa = 10 bar

Specific Enthalpy

	kJ/kg	kcal/kg
1 kJ/kg =	1	0.238 846
1 kcal/kg =	4.186 8	1

Specific Entropy

	kJ/(kgK)	kcal/(kgK)
1 kJ/(kg K) =	1	0.238 846
1 kcal/(kgK) =	4.1868	1

Specific Heat Capacity

	kJ/(kgK)	kcal/kg°C
1 kJ/(kg K) =	1	0.238 846
1 kcal/(kg°C) =	4.186 8	1

Dynamic Viscosity	Pa.s[kg/(m.s)]	kgf s/m^2
1 Pa.s[kg/(m.s)] =	1	0.101 972
1 kgf s/m^2 =	9.806 65	1

1 Poise (P) = 1 g/(cm s) = 1 dyn s/cm^2 = 10^{-1} Pa.s

Thermal Conductivity

	W/(m.K)	kcal/(mh °C)
1 W/(m.K) =	1	0.859 845
1 kcal/(mh°C) =	1.163	1